SOUTH ASIAN AMERICANS' PERCEPTIONS OF EXPERIENCES IN SCHOOL IN CONTEXT OF TEACHER CULTURAL COMPETENCE

By

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A dissertation submitted to Johns Hopkins University in conformity with the requirements for the degree of Doctor of Education

Baltimore, Maryland

March 2017

ABSTRACT

This study examines South Asian Americans' perceptions of experiences in school (K-12), especially in context of their teachers' cultural competence. The study utilizes a survey (n = 85) and examines: academic support needs; executive functioning support needs; perceived cultural competence of teachers, including belief in the model minority myth; overall connectedness to school. Findings suggest South Asian Americans population may have academic and executive functioning support needs that teachers may not have met, that they perceive teachers as lacking cultural proficiency, and that they may not feel as connected to school as they imagine their peers do, and may not have had ideal overall experiences in school. Findings also suggest perceived low teacher cultural competence is closely correlated with overall negative experiences in school.

Keywords: South Asian Americans, Indian Americans, cultural competence

Rice, P. C. (2017). *South Asian Americans' Perceptions of Experiences in School in Context of Teacher Cultural Competence* (Doctoral Dissertation).

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APPROVAL OF DISSERTATION

JOHNS HOPKINS
SCHOOL of EDUCATION

Approval of Final Dissertation

Student: Punita Rice Adviser: Christine Eith

Dissertation Title:

South Asian Americans' Perceptions of Experiences in School in context of Teachers' Cultural Competence

Date Approved: 3/13/17

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Dedication

To my parents, Sonia Chhabra and Rachhpal Singh: For your sacrifices and for your generosity, for your successes and for your humility, for teaching me the value of hard work and what matters most in life, and for every opportunity I have had in my life,
I dedicate this dissertation to you.

To my husband, David Rice: For being my partner, for your love, for holding my hand on every step of this, and every journey, and for never thinking any of my dreams is too big,
I dedicate this dissertation to you.

Acknowledgments

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I would like to offer my sincerest thanks to the people that made this work possible. First, to every person who participated in my research: Thank you; any good that comes from this work is thanks to your willingness to share your experiences.

Three people have had enormous influence on my doctoral journey: my adviser, Dr. Christine Eith, and the members of my committee, Dr. Ranjini JohnBull, and Dr. Camille Bryant. You three are inspirations to me. Dr. Bryant, thank you for helping develop my research questions, and for your patience. Dr. JohnBull, thank you for teaching me the importance of "so what?" and for the gentle advice to be kind to myself. Dr. Eith, thank you for countless hours of your time, for helping me grow as a researcher, for being my thought partner, and for believing in this work and helping make it a reality.

I also thank several faculty members for their guidance. Dr. Henry Smith, thank you for helping me think through my problem of practice. Dr. Chris Sessums, thank you for inspiring me to share my work online. Dr. Yolanda Abel, thank you for teaching me why this work matters in a multicultural context. Dr. Justin Malone, thank you for letting me be your TA; I hope to emulate your approach to instruction in my own career.

Several colleagues, and educators have been instrumental to this work. To my former principal, Alicia Deeny, thank you for your support when I began this work, and for making time to help me think through my initial thoughts. Thank you Kathryn

Medland and Crystal Johnson, for embodying compassionate teaching. To my high school English teacher, Davina Smith: Your enthusiasm for learning is why I got involved in education. Passionate teachers like you change lives; thank you.

Some dear friends and family have breathed energy and excitement into this experience. Anuja Oak, thank you for exhaustively editing my early work, and for your words of support. Dr. Natalie Duvall, thank you for your wisdom on balancing the work with being a new Mom; you have been a constant inspiration on this journey. My classmates Heather Yuhaniak, Matt Paushter, Nikki Woodward: Our study group became one of my favorite parts of this program (and kept my head on straight!). To my loving parents-in-law, Mary and Kim Rice, thank you for being in my cheering section, and for your faith in decisions we have made on this journey. To my brother, Arjun Chhabra, thank you for always rooting for me. To my grandparents, Narinder and Shamsher Singh Chowdhary, thank you for teaching me to build my stamina for hard work.

Mama and Papa, I don't know where to start. Thank you for teaching me the importance of hard work, for pushing me out of my comfort zone again and again, for your faith, and for making this *possible*. This degree is yours (Mama it's your 'BB!').

Naveen, you make me smile all day. I'm so thankful to be your Mama. I love you!

David. Thank you for understanding and encouraging, for raising me up when it felt like too much, for being patient when the writing was never-ending, and for so, so many oats. Thank you for being the greatest husband, and greatest dad to our bug. This degree belongs to you, too. We did it! I love you times a googolplex!

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EXECUTIVE SUMMARY

This study opens with a review of literature on Asian American students, the limited literature on South Asian American students, and existing research on the impact of low teacher cultural competence. This is followed by a discussion of results from an exploratory study, consisting of a quantitative survey and a group interview, which establish that teachers may believe stereotypes about South Asian American students, including the model minority myth, and may believe these students need less support than they actually do. This culminates in a discussion of the need for further of South Asian Americans' overall perceptions of experiences in their K-12 school experiences.

This study then examines four major concepts through a survey of South Asian American adults (n = 85), reflecting on their K-12 experiences: (1) their academic and (2) executive functioning support needs, and whether these needs are met, (3) their perception of their K-12 teachers' cultural competence, and (4) their connectedness to school and overall experiences in school.

Findings suggest South Asian Americans have many support needs, including academic and executive functioning support needs, and that these are not always met, suggesting there is value in improving support given to students. Findings also suggest many South Asian Americans perceive teachers as lacking cultural proficiency, that many may not have felt connected to school, or had ideal experiences in school, and that the concepts of low teacher cultural competence and negative experience are closely related.

CHAPTER ONE

INTRODUCTION

The growing population of Indian American students (U.S. Census Bureau, 2013) and other South Asian American students demands a need for research about their culture and needs, as well as culturally proficient, competent educators. There exists little literature about the needs of these students, and what does exist is problematic, in that it tends to overgeneralize and treat diverse subgroups of Asian American students as one homogenous group (Blair & Qian, 1998; Lee, 1994, 2015; Littlewood, 2000; Ogbu, 1987; Yang, 2004). In actuality, Asian student groups are heterogeneous, and differ in histories, cultures, and experiences (Kim, McLeod, & Shantziz, 1992; Lee, 1994, 2015; Ogbu, 1987), as well as needs, and ability levels. While even the United States government has recognized a need for higher data collection standards related to Asian American students, federal guidelines do not yet require a high level of granularity (Harris-Kojetin, 2012; King, 2016; White House Initiative on Asian Americans and Pacific Islanders, 2015); consequently, research continues to overgeneralize about these students.

This lack of research may limit existing professional training, which already tends not to put enough emphasis on building teachers' skills in multicultural education, resulting in teachers who are simply "inadequately prepared to teach ethnically diverse students" (Gay, 2002, p. 106). Teachers may consequently lack cultural competence, and tend to believe stereotypes about their students (Parks & Kennedy, 2007), including that their Asian and Indian American are a model minority (Blair & Qian, 1998; Chang & Sue, 2003; Lee, 1994, 2015; Leong, Chao, & Hardin, 2000; Wong, 1980). While

perceiving a group of students as highly capable, and possessing superior academic abilities (Chang & Sue, 2003, Wong, 1980) may seem to be a positive stereotype for that group, it can be damaging to the school culture (Lee, 2015), and even more, to the students themselves, particularly when it does not fit (Li, 2005; Yang, 2004). Further, the perception of Asian American students as a model minority may mean teachers imagine Indian and other South Asian American students need less support than they actually do.

The problem of practice theorized by the researcher is trifold: (1) there exists little literature on South Asian American students; (2) as a consequence, educators may lack cultural competence in supporting these students, and may believe stereotypes about them; (3) as a further consequence, South Asian American students' academic outcomes may be impacted by the resulting lack of support. Thus, an intervention to this multi-faceted problem is exploratory research examining teachers' actual cultural competence, and examining how it impacts South Asian American students' connectedness and experiences in school, in order to begin developing a framework for understanding these students and their experiences and needs, thereby contributing to the literature.

The issues of limited literature, possible low teacher cultural competence, and the potential impact on South Asian American students, require a multi-pronged study, which first establishes that teachers have low cultural competence and may tend to overestimate the abilities of their South Asian American students, delves into their beliefs about these students, and examines the perceptions of these students themselves. This study, then, functions as an exploration into how the lack of literature about South Asian American students indirectly impacts the students, by examining their perceptions.

Rationale

There is a need to examine the experiences of South Asian American students, as few studies have delved into their experiences. As the exploratory studies within this research demonstrate, this does seem to impact the cultural competence of education practitioners, who may tend to have very limited cultural competence related to these students, and may tend to believe the model minority myth. Because the students have diverse needs, deficiency in teachers' cultural competence, and their belief in this stereotype may be harmful. Consequently, there is a need to contribute to the currently scarce literature on South Asian Americans, and examine their experiences as students.

This dissertation is organized into five chapters. Chapter One provides an overview of the background, problem, purpose, research questions, rationale, and limitations of this study. Chapter Two examines literature on teachers low cultural competence, literature on Asian Americans, the lack of literature on Indian and South Asian Americans, and the need for further exploration. It also includes results of exploratory studies conducted to assess the need for this study, and a discussion of the importance of further research. Chapter Three describes methods and procedures used to study the perceptions and experiences of South Asian Americans in this work. Chapter Four is an analysis of the results of this study, and Chapter Five is a discussion of the results, and their implications for both practice and further research.

CHAPTER TWO

REVIEW OF LITERATURE AND EXPLORATORY STUDIES

Introduction

As classrooms in the United States grow exceedingly diverse (National Education Association, 2015), and the population of Indian American[1] students in the United States continues to grow (U.S. Census Bureau, 2013), it becomes increasingly important that educators have culturally competence and proficiency in supporting their South Asian American students. Cultural competence, or proficiency, is defined as the knowledge, literacy, skills, and attitudes and beliefs (JohnBull, 2012) about a particular group, that enable a teacher to work well with, respond effectively to, and be supportive of people in cross-cultural settings (Gay, 2010; Guerra & Nelson, 2007; Hammond, 2014; Nieto, 2013). Teachers must be able to support diverse classroom populations (Brookfield, 2015); cultural competence or proficiency enables them to provide diverse groups of students with better support and instruction (Gay, 2010). In fact, it is clear that teachers must be proficient in students' cultures to effectively address their unique needs (Hammond, 2014; Nieto, 2013); however, many may be underprepared to teach and support diverse students (Gay, 2002). Further, teachers may not receive necessary cultural competence or proficiency training related to their South Asian American

[1] School enrollment statistics on South Asian American students are unavailable federally and on the state level (Maryland State Department of Education, 2016; National Center for Education Statistics, 2015c).

students, may have low cultural literacy related to them, and may not be providing them with high quality support or instruction suited to their individual needs. Thus, low teacher cultural competence may impact South Asian American students' overall experiences.

This problem is particularly important in light of a growing South Asian American population. It is not possible to determine how many South Asian American students are in U.S. schools, at least partly because federal guidelines do not require such granularity in reporting data on Asian Americans (White House Initiative on Asian Americans and Pacific Islanders, 2012), and the National Center for Education Statistics (2015c), as well as state departments of education (Maryland State Department of Education, 2016) often group all Asian American groups together. However, it can be estimated that there are at least 11,868 Indian American students in Maryland alone, and this number is likely to continue to grow (Appendix A provides a detailed explanation of how this number is estimated).

In the case of the Montgomery County Public Schools (MCPS) system in Maryland (MCPS), there is a system-wide aim to support all learners (Montgomery County Public Schools, 2015). Yet while this district does offer an optional multicultural education course for teachers (Montgomery County Public Schools, 2014b), and more recently, optional religious literacy[2] training, it does not mandate training in these areas, and the training that is offered does not focus on proficiency in supporting specific cultural groups such as Indian American students. This is particularly significant because

[2] A message from a resource teacher indicates that an optional summer course, "Religious Literacy for Educators" is now offered, for a $90 fee (name withheld, personal communication, April 18, 2016).

there are at least 32,500 Indian Americans in Montgomery County, Maryland (U.S. Census Bureau, 2013). While exact enrollment of Indian American students in MCPS cannot be obtained, because MCPS, like many other districts, groups students from Indian and other South Asian backgrounds with all Asian American subgroups (OpenDataMCPS, 2015), it can be reasonably stated that there is a sizable Indian and South Asian American population in the school system as well. As a consequence of limited training and insufficient emphasis on multicultural education within professional programs (Gay, 2002), teachers' cultural competence related to these students is likely impacted. Since teachers have varying levels of cultural competence (McAllister & Irvine, 2000), and may even harbor stereotypes about students (Lee, 2015; Parks & Kennedy, 2007; Wong, 1980), all teachers may not be culturally competent in supporting all students effectively. Consequently, they may not provide all students with the academic support they need.

The lack of teacher training and its impact on cultural competence may be due in part to the greater problem of a lack of literature to inform such training. There currently exists very little literature on specific Asian American subgroups, including Indian and other South Asian Americans; the literature that does exist tends to overgeneralize, and treats Asian cultures as a single homogenous group (Blair & Qian, 1998; Lee, 1994; Littlewood, 2000; Ogbu, 1987; Yang, 2004). Since meaningful cultural competence training should be explicit and specific (McAllister & Irvine, 2000), and likely, the dearth in literature on South Asian American students' culture and needs stands in the way of developing such training. Thus, while a lack of cultural competence training may exist on

the school level, the lack of existing literature on Indian American culture may contribute to the underlying problem on an institutional level.

Review of the Literature

Existing literature on South Asian American students is very limited (Rahman & Paik, 2017), and what does exist about Asian American students tends to overgeneralize (Blair & Qian, 1998; Leong, Chao, & Hardin, 2000). While a lack of research in this area has far-reaching implications, the impact is likely most felt in a classroom context, where it may contribute to lower cultural competence[3] among the many teachers who work with and support South Asian American students in their diverse student populations. Thus, it is worth examining the effects of this problem on teachers, students, and school culture.

A review of the existing literature on Asian and South Asian American students suggests that these populations have long been perceived as a homogenous group of students that are a "model minority" (Blair & Qian, 1998; Kitano & Sue, 1973; Lee, 1994; Wong, 1980). However, this view is misguided (Leong, Chao, & Hardin, 2000), and there exists great potential for harm when teachers believe this, or any other stereotype about their students (Li, 2005; Yang, 2004). Further, the lack of literature on South Asian American students specifically (Rahman & Paik, 2017) may also directly contribute to a particular lack of teacher cultural proficiency in supporting this group.

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[3] Cultural competence or proficiency, in the context of the research that follows, is defined as having the necessary knowledge, literacy, skills, attitudes, and beliefs (JohnBull, 2012) about a particular group, such that the person would be able to work well with, respond effectively to, and be supportive of people in cross-cultural settings (Gay, 2010; Guerra & Nelson, 2007; Hammond, 2014; Nieto, 2013).

Finally, a review of existing literature on cultural competence indicates that there is, indeed, evidence of low cultural competence among teachers, which often manifests as belief in stereotypes (Chang & Sue, 2003; Parks & Kennedy, 2007). This literature reveals the importance of culturally responsive teaching (CRT), the dangers in teachers' biases, and the potentially negative impact of low teacher cultural proficiency.

Existing Research on Asian American Students

There is little literature and research into the experiences of Indian and South Asian American students, which may contribute to a lack of general knowledge and understanding of their cultures, experiences, and needs. This may influence teachers' perceptions of their Indian American students. What little literature does exist tends to overgeneralize about Asian Americans (Blair & Qian, 1998; Lee, 1994; Littlewood, 2000; Ogbu, 1987; Yang, 2004), which does little to help improve teachers' literacy or understanding about their Indian or Asian American students. Existing literature tends to discuss Asian American students as a respectful (Blair & Qian, 1998; Schmid, 2001), self-reliant (Littlewood, 2000), overachieving (Kao, 1995) model minority (Kitano & Sue, 1973; Wong, 1980), which may inform teacher perceptions. However, the model minority stereotype is misguided and misleading (Leong, Chao, & Hardin, 2002; Li, 2005), and teachers' stereotyping may harm the students (Parks & Kennedy, 2007). It may also lead teachers to provide these students with less support than they may need.

Teachers' may hold misguided beliefs about their Asian and Indian American students, and these beliefs may stem from many different possible factors. For a variety of reasons (Hirschman & Wong, 1986), teachers may believe the model minority myth

and imagine all Asian and Indian American students are very intelligent and capable (Wong, 1980): the history of high academic achievement by Asian Americans (Hirschman & Wong, 1986), their tendency toward self-reliance (Littlewood, 2001), or the high amount of respect Asian American students tend to show their teachers (Blair & Qian, 1998; Schmid, 2001).

Perception of Asian Americans as a homogenous population. There has long been a tendency to treat Asian American subgroups as part of a singular, homogenous population (Leong, Chao, & Hardin, 2000), as a matter of perception as well as policy. There may be a sense among researchers and teachers that there is no need to examine experiences of Asian Americans (Leong, Chao & Hardin, 2000), and that the South Asian experience is identical to that of any other Asian American's experience. However, the idea that all Asians are the same is not only "erroneous," but also "has led to numerous therapeutic problems" (Sue & Sue, 2013, p. 290). "Asian" is a broad term, with diverse cultures, religions, languages, values, and ethnicities, from Southeast Asian islanders, to some nations in the Middle East (Harpalani, 2009). However, even while teachers should understand within-group variations for students of similar backgrounds, as well as between-group differences for students of diverse backgrounds (National Education Association, 2015), many may treat Asian students as one large group, without accounting for their differences.

Asian immigration once occurred to a lesser degree than it has in recent decades, and when less heterogeneous groups of Asian immigrants came to this country, it may have once been, if not acceptable, at least more logical, to characterize them all as a

monolithic group. However, Asian and South Asian immigrants in the last few decades have been far more diverse than those of the past (Leong, Chao, & Hardin, 2000; Rahman & Paik, 2017), that Asian American is now too broad a term. In fact, there is a great deal of variation in the success of Asian subgroups (Barringer, Takeuchi, & Xenos, 1990).

Barringer, Takeuchi, and Xenos's (1990) study finds that while many Asian American individuals, and Asian American communities may be "better educated and better paid" than are "other American minorities," there is variation in their overall success (p. 29). For instance, in some cases, Indians show the highest rate of graduate education compared to other Asian American students (Barringer, Takeuchi, & Xenos, 1990). The study examines data from the 1980 Census 5% Public Use Sample [PUMS A], and used a sample size of approximately 20,000 Asian Americans and about 5,000 people of other races for comparison purposes, and further highlights the need to examine individual subpopulations of Asian Americans individually. The researchers observed that existing research was limited to only a few ethnicities, and typically did not examine specific factors influencing Asian American career success. The study analyzed the data to determine the influence of certain sociological factors on the perceived success of Asian Americans (Barringer, Takeuchi, & Xenos, 1990).

This diversity exists among South Asian Americans specifically, as well (Rahman & Paik, 2017). Through an examination of the historical and sociological contexts of South Asian immigration, as well as the socioeconomic and educational attainment outcomes of these populations, Rahman and Paik (2017) present an image of South Asians in the United States that is diverse and varied. Through an analysis of existing

literature, their work outlines an early history of South Asian immigrants who faced societal and legal challenges in incorporating into American society. They contrast this history of the earliest South Asian migrants with migrants in the last few decades, who have faced fewer barriers to incorporation in society, and generally arrive under more favorable conditions, but assert that a great many immigrants have different experiences, and face unique challenges (Rahman & Paik, 2017). It is important to recognize that students have differing experiences when they come from differing cultural backgrounds.

As Lee, Spencer, and Harpalani's (2003) study suggests, cultural socialization is a critical component of students' racial experiences and identity formation, and differing cultural socialization experiences impact how racial experiences are processed and interpreted. In their work, the authors point out that students from various ancestral groups, with diverse ethnic and cultural traditions are often identified solely as Black; so are Asian American students are lumped together (Lee, Spencer, & Harpalani, 2003). For Black students, "while they absolutely share everyday experiences of race as well as common cultural histories... they also represent different paths of cultural socialization" (Lee, Spencer, & Harpalani, p. 12); the same can be said of Asian American students.

The "model minority" stereotype. Asian Americans have been seen as the model minority since the 70s, when Kitano and Sue's (1973) study suggested Asian Americans are perceived as a non-oppressed, model minority group, in spite of this perception being "inaccurate and misleading" (Leong, Chao, & Hardin, 2002, p. 180). There exists a history of teachers believing the myth as well; Wong's (1980) study suggests teachers may perceive Asian students as "model students" who are "more

academically competent and more emotionally stable" than their white counterparts (Wong, 1980, p. 245-246). Wong's (1980) study, the first to compare teachers' perceptions and expectations of Asian and White students, examined a stratified random sample of 1,163 diverse students and their teachers across 144 schools in California, and relied on questionnaires and surveys on sociability, emotional stability, and academic competence, to examine teachers' and families' perceptions of Asian students' performance and emotional and behavioral characteristics. The work also suggests teachers' perceptions of Asian students as model students impact students' perceptions and expectations of themselves (Wong, 1980).

Given that much of the existing literature on Asian American students treats Asian students as a massive homogeneous group (Blair & Qian, 1998; Leong, Chao, & Hardin, 2000), it is possible that even those teachers who seek out independent research as a means of professional growth may be misled, since existing literature tends to focus on the commonalities among Asian American students: Many Indian American students are respectful to their teachers (Blair & Qian, 1998; Schmid, 2001); many Asian American students are self-reliant (Littlewood, 2000); many Asian Americans do value high grades (Kao, 1995); Asian Americans have historically been successful academically (Hirschman & Wong, 1986). Much of the literature focuses factors in Asian American students' success; this may contribute to teachers' belief in the misconception that these findings are the norm for all Asian Americans.

History of high academic achievement among Asian Americans. Hirschman and Wong's (1986) study provides some insight into where the model minority myth may

stem from. They examined decennial census data for Asian groups from 1890, a 25 percent sample of published census records from 1960, and cross-sectional census data from 1960 and 1970, for trends in Asian Americans' high educational attainment (Hirschman & Wong, 1986). Their study also explores the history of Asian Americans' high academic and economic achievement, and finds that Asians have been on par economically with whites (in some cases, surpassing them) since the early 1900s, in spite of discrimination. Hirschman and Wong's (1986) research establishes a long history of academic success among Asian Americans. Their study examined decennial census data for Asian groups from 1890, a 25 percent sample of published census records from 1960, and cross-sectional census data from 1960 and 1970, to examine trends in Asian Americans' high educational attainment. They found Asians have been on par economically with whites (in some cases, surpassing them) since the early 1900s, in spite of discrimination. Such literature, which emphasizes a long history of achievement, may reinforce the model minority myth.

Perception of Asian American students as self-reliant. Teachers may also believe that all of their Asian American students prefer self-directed, independent work. This belief is not unfounded; existing literature seems to indicate that Asian American students are self-reliant in their learning (Littlewood, 2000). Littlewood's (2000) large-scale study established that Asian students, as compared with European students, have a tendency toward self-reliance, and prefer to not be "spoonfed" knowledge (p. 34). This study explored the impact of cultural norms on student learning attitudes and preferences along three domains: (1) the authority of the teacher, (2) the role of teachers in imparting

knowledge to the student, and (3) the responsibility of teachers in evaluating students' learning (Littlewood, 2000). These statements were developed into a twelve-item questionnaire administered to 2,307 students across eleven Asian countries, and 349 students in three European countries. Through the questions on students' attitudes on teacher authority, teacher role in imparting knowledge, and responsibility in evaluating students' learning, the study found Asian students specifically prefer to "explore knowledge themselves and find their own answers," (Littlewood, 2000, p. 34), demonstrating a preference for self-reliance. These findings suggest that teachers may be right in imagining that many of their Asian American students may prefer to discover some types of knowledge on their own (Littlewood, 2000). However, this should not be treated as a rule, and should not be used as a reason not to provide support, extra help, or guidance to Indian and Asian American students, since many of them may actually need it. While the findings support the idea that many Asian students tend to be self-reliant, it should also be noted that Littlewood's (2000) study also finds greater variation among individuals in each country than between countries. This further supports that individual students from similar backgrounds are different from one another, thus highlighting the importance of not stereotyping or overgeneralizing.

In a study based on the NELS-88 data, Kao, who has written extensively on ethnic identity and its role in academic performance, examined data on 1,527 Asian students, to find influences on the test scores of Asian eighth grade students (Kao, 1995). Kao also conducted three focus groups in 1992 with different ethnic groups of university level students, and asked open-ended questions regarding the "salience of their ethnic identity

and how their identification plays out in everyday life" (Kao, 1995, p. 130). The research indicates differences in performance can be explained by family, and suggests Asian students feel pressure from their families to "overachieve," as well as to pursue technical fields rather than creative (Kao, 1995, p. 151). Some Asian families believe instability is a reality of life, and anxiety about this may factor in the cultural emphasis on education (Kao, 1995). While such findings are not reflective of all Asian or Indian American students, they do reflect beliefs many teachers may already hold about these students, and may consequently expect such norms to be true of all Asian Americans.

It is worth noting that other existing literature also finds Asian parents are less likely to help their children with homework than other races (Sun, 1998, p. 443). While this may actually teach Asian American students to be self-reliant, it may also decrease the likelihood of students' asking for help when they need it from their teacher, which further increases the need for teachers to offer these students support even when they seem self-sufficient. Thus, teachers' cultural competence, including their recognition of the diversity of ability level and support need among their Indian American or Asian American students becomes increasingly important.

Perception of Asian American students as respectful and successful. Blair and Qian's (1998) study also suggests Asian American students tend to demonstrate a high level of respect and trust for their teachers. While the students' high respect for teachers (Blair & Qian, 1998; Ogbu & Simons, 1998; Schmid, 2001) tends to benefit them academically (Blair & Qian, 1998), it might contribute to teachers' perception of the students as a model minority.

Schmid's (2001) study is one rare study that does delve into the experiences of Indian American students specifically. The broad focus of the study is an examination of the values of second-generation Asian and Latin American students, and provides insights into the impact of economic opportunity, ethnic status, and perception of the social group on student performance, and argues existing literature has not explored experiences of second-generation students thoroughly enough. These findings on Indian (specifically, Punjabi) students in California identify "a tradition of respect for teachers" among students, and suggest this tradition contributes to the "positive value they [students] place on education" (Schmid, 2001, p. 76). . The study suggests that Indian Americans may tend to have more respect (Schmid, 2001) and trust (Ogbu & Simons, 1998) for teachers than do other cultural groups. Notably, Schmid's (2001) findings regarding Indian American students' high level of respect for teachers aligns with broader findings about Asian American students (Blair & Qian, 1998), which also identifies Asian American students as highly respectful. While teachers may receive this tendency positively, it may also contribute to the model minority myth.

Blair and Qian's (1998) study revealed Asian American students' high level of respect and trust for their teachers is beneficial to their academic success, and also highlights the lack of distinction made between types of Asian in the existing literature, and a particular dearth of existing literature on Indian American students. The study examined a sample of 810 Asian students, from the 1992 National Educational Longitudinal Study (NELS) data from 1988 (NELS-88) for variation in Asian American ethnic subgroups, and factors in the differences. The researchers examined how culture

and sociodemographic characteristics, and families' "decision-making processes pertaining to educational and occupational goals for the students themselves" impacted grades (Blair & Qian, 1998, p. 362), and found religion, language spoken at home, parents' education, number of siblings, income, and availability of education materials at home influenced differences in performance among subgroups (Blair & Qian, 1998). Findings such as these may reflect beliefs teachers hold about their Asian and Indian students, and while they are not true of all students within these demographics, they may inform teachers' opinions and expectations of these students. While Blair and Qian's (1998) study does suggest significant overlaps between various Asian subgroups, their work also discusses the problematic lack of distinction made between Asian groups in existing literature, and establishes the need for future research to more carefully distinguish between different Asian groups.

Lee's (2004) paper established that some Asian students, due to the model minority myth, feel pressure to conform to it. The study relied on data collected in a larger ethnographic study on the development of 2,050 Asian American high school students' identities, and involved participant observations, surveys, interviews, and analysis of site documents (Lee, 2004). The study examines student identities, perceptions and attitudes regarding future performance, and factors influencing these, and demonstrates that Asian students face high amounts of pressure (Blair & Qian, 1998; Lee, 2004; Ogbu & Simons, 1998). The research also points out that there is diversity in the performance of various Asian American subgroups (Lee, 2004). These findings emphasize the importance of examining Asian American subgroups separately, and also

reflect Kao's (1995) findings on the pressures faced by students.

Lee's (2015) book examines how the seemingly innocuous, or even flattering, model minority stereotype impacts student culture. Lee's work, which relies on an ethnographic study of high school students to examine Asian American students' identities, examines how young people experience the model minority stereotype (2015). The work identifies the complexity of race relations within schools, and highlights various dilemmas Asian American students may face due to their perceptions of themselves as a result of the stereotype (Lee, 2015). The work also suggests that the model minority stereotype tends to mask racism, due to the fact that it seems to be a compliment (Lee, 2015), which may further lead teachers away from serving the needs of their Asian American students. While the work does not delve into the specific experiences of Indian American students, it does highlight the negative impact of overgeneralizing and stereotyping on Asian American students as a whole (Lee, 2015).

The myth of the model minority. In spite of evidence to the contrary, the myth of the model minority persists, and continues to misguide researchers and education practitioners, to the detriment of the students themselves, and the overall community in which they are situated (Leong, Chao, & Hardin, 2000). In an attempt to provide a more realistic and complex view of Asian American adolescents than that which persists as a consequence of the existing stereotype, Leong, Chao, and Hardin (2000) provide an intensive review of literature. Their work provides an overview of literature in three primary categories: the academic achievement of Asian American students, Asian American adolescents' ethnic identity, and Asian American adolescents' psychological

adjustment. The authors explicitly assert that their findings "are contrary to the model minority image of Asian American adolescents" (Leong, Chao, Hardin, 2000, p. 203). Additionally, they suggest Asian Americans may face greater challenges in their ethnic identity development than adolescents from other cultural or ethnic backgrounds (Leong, Chao, & Hardin, 2000). Their work clearly points to the model minority stereotype as being both untrue, and harmful.

Li's (2005) multi-faceted study examined United States census data from 2001, reviewed literature on Asian American students, and conducted an in-depth case study of an Asian American family referred to as the Lous. The paper suggests the "model minority" myth, in which Asian American students are perceived as perfect, respectful, highly capable, and hardworking students, is "invalid and inaccurate" for many, due to vast differences among Asian groups and "increased evidence of Asian underachievement" (p. 72). The researcher's case study suggests pressure due to the model minority myth harms students not fitting the stereotype (Li, 2005; Yang, 2004). Further, the findings suggest that these non-model students are harmed by teachers' belief that they are more capable than they are (Li, 2005).

While there are studies that demonstrate the positive effects of believing students are highly capable, this is not an indication that the model minority myth is a positive thing. In Rosenthal and Jacobson's (1968) famous Pygmalion study, the power of self-fulfilling prophecy was demonstrated. This study suggests that when teachers believe students can or will show greater intellectual gains than their peers, those students actually make greater intellectual gains than their peers, suggesting that students may

actually demonstrate greater outcomes when their teachers believe they will (Rosenthal & Jacobson, 1968). However, this does not serve as evidence that the model minority myth is beneficial. In fact, the perpetuation of the model minority myth not only presents a false image of Asian American students, but it may also harm them by holding them to an unattainable standard, and harm relationships between them and other communities (Leong, Chao, & Hardin, 2000).

Impact of model minority myth on lower-performing students. While some Indian and Asian American students may fit the model minority stereotype, many more may need extra support, be far from the stereotype, or demonstrate deficiencies in verbal communication or participation (Li, 2005; Wong, 1980; Yang, 2004). Unfortunately, perhaps as a consequence of stereotypical beliefs (Chang & Sue, 2003; Parks & Kennedy, 2007), teachers may assume these students do not need support, or may end up overlooking these needs, which may result in students not receiving the support they need. In the case of verbal communication skills, this can be particularly harmful; deficiencies in communication skills can negatively impact students' academic potential (Rosenfeld, Grant, & McCroskey, 1995), since verbal communication is valuable in schools (Test, Fowler, Wood, Brewer, & Eddy, 2005), and the workforce (Gabric & McFadden, 2001). For those students who are also English language learners, it is even more critical for teachers to provide scaffolds to promote student learning and understanding (Scarcella & Oxford, 1992). Teachers must understand students' cultures and needs to be culturally responsive (Hammond, 2014; Nieto, 2013) and teach effectively (Gay, 2010), especially for students who do not fit the model minority

stereotype (Li, 2005; Yang, 2004).

Even while there are many distinct Asian American cultures and communities, and great diversity in the skill level of individual students within each community, Yang's (2004) work suggests teachers tend to group all Asian American students together, and assume they all fit the model minority stereotype. Similarly, Li's (2005) study suggests that because the model minority stereotype is more myth than fact for so many Asian American students, the stereotype is harmful. In particular, the work points out the "underachievement" of so many Asian American students as evidence for the risks associated with the stereotype (Li, 2005, p. 72). These works support the idea that non-model students need more support from teachers and families than they get (Li, 2005). Because low cultural competence has a negative impact on both high achieving and lower achieving students, it is necessary to provide teachers proficiency training.

For instance, Southeast Asian refugee students, who may exhibit deficiencies in educational attainment, may also be held to the stereotype that many Asian American students are held to (Yang, 2004). This suggests that teachers may tend to lump all Asian American students together, even without reasonable cause (Yang, 2004). Yang's (2004) study, based on U.S. Census data from 2000 on educational attainment and English language abilities, finds that those Asian students who do not fit the model minority stereotype face challenges in their education. The paper examines data on over one million Southeast Asian Americans, and deficiencies in the educational attainment of many Southeast Asian refugees, and highlights the needs of some Asian groups (Yang, 2004). It explores the pressure on Asian students to perform, even when that pressure is

not supported by reasonable expectations (Yang, 2004).

While many Indian and Asian families emphasize high measurable grades, they may not emphasize soft skills such as verbal communication (Kao, 1995). Some Indian or Asian American students may actually participate less (Wong, 1980), or have deficiencies in these skills. While many American middle-class families teach their children the "cultural capital" of self-advocacy and communication, and provide them "opportunity to develop and practice verbal skills," especially in communicating with adults (p. 117), it is possible that many Indian American students are not. It may be that children raised with this skill may "repeatedly seek to reason with their parents... challenge, and even reject, parental authority" (Lareau, 2011, pp. 111-117), which is perceived as disrespectful. Indian families, who emphasize respect for elders and authority (Schmid, 2001), may not value teaching their children to negotiate or advocate with them, and so, many not emphasize this cultural capital or skill. Possibly, the perception of Indian American students as a respectful model minority may prevent teachers from recognizing this deficiency, or ignoring it, since it may be paired with a respectful attitude. Thus, these students do not receive necessary support in building academic skills they may simply not have.

Impact of model minority myth on higher-performing students. Teachers' high expectations (Kao, 1995) may put unnecessary pressure on students to perform well or fit the model minority image (Lee, 2015). As Leong, Chao, and Hardin (2000) report, the model minority myth "sets up unrealistic expectations and standards" for Asian Americans, compelling them to try and live up to an image of a super minority (p. 180).

This can be particularly difficult for those students who already face significant pressure; many Asian families may already "expect their children to get high grades" (Ogbu & Simons, 1998, p. 177), and Asian American students may associate success in school with their families' "honor" (Blair & Qian, 1998, p. 371). Or, the students may feel a sense of responsibility or guilt for "sacrifices" their families may have made for them to attend school in the United States (Lee, 2004, p. 417). In such circumstances, it may not be advisable or desirable for students to receive further pressure from authority figures or educators. Additionally, students perceived as model students may feel pressure to maintain this perception, thus inhibiting them from seeking help even if they need it (Lee, 2015), highlighting another danger of positioning these students as a model minority.

Existing pressure to overachieve. Findings indicate that Asian American students may face great pressure from their families to overachieve (Cheng & Starks, 2002; Kao, 1995; Lee, 2004). In a study based on the NELS-88 data, Kao, who has written extensively on ethnic identity and its role in academic performance, examined data on 1,527 Asian students, to find influences on the test scores of Asian eighth grade students (Kao, 1995). Kao's findings indicate Asian students' overall performance can be explained by family factors, with some differences in performance among particular Asian subgroups. The study suggests Asian students feel immense pressure from their families to "overachieve," as well as pressure to pursue technical fields rather than creative (Kao, 1995, p. 151). Some Asian families may believe instability is a reality of life, and anxiety about this may factor in the cultural emphasis on education (Kao, 1995). Since Asian American students already feel high amounts of familial and cultural

pressure to perform well academically, possibly, teachers' expectations and beliefs about their students' high abilities (Wong, 1980), coupled with teachers' perception that these students tend not to need much support further add to these pressures.

Existing pressure regarding academic expectations from parents. Asian American students feel great pressure to succeed academically (Cheng & Starks, 2002; Sun, 1998). Sun's (1998) study, which indicates some Asian American students feel a "pushing effect" from expectations of family, friends, and educators (Sun, 1998, p. 436), demonstrates that parental pressure has a significant impact on student performance (Sun, 1998). In a study corroborating this pushing effect phenomenon, Cheng and Starks (2002) examined NELS-88 data and examined race and reported beliefs of 20,840 students, in order to examine how students' relationships with teachers, relatives, and peers, and how racial differences impact students' educational aspirations. Among their findings, they discovered hey found that non-White parents hold higher educational aspirations for their children than White parents, and that students of some races are more likely to perceive higher educational expectations from teachers than others. Many Asian American students already feel immense pressure to succeed (Cheng & Starks, 2002; Kao, 1995; Lee, 2004; Sun, 1998), and may not need or benefit from more pressure from their teachers. While this pressure impacts high performing Asian Americans, it may be most problematic for those who are furthest from the model minority stereotype (Li, 2005).

Macias's (1993) study found many Asian American families come from countries with rigorous education systems. The paper, which analyzes existing literature, examines the pressure Asian students feel to perform well academically. The study also explores

the emphasis on math and science over verbal communication or self-advocating (Macias, 1993). The study discusses the historical, structural factors and cultural politics that influence the high achievement of Asian immigrants in the United States, and seeks to explain why they have long been perceived as a "successful and model ethnic minority group" (Macias, 1993, p. 410). Further, cultural history may influence the emphasis on high achievement: the post-colonial school system in India was influenced by the British colonial emphasis on educating "small numbers from the elite social classes" (Macias, 1993, p. 415). The respect for education in Indian culture (Schmid, 2001) may come from this association of education and the elite. This precedent of high performance in the United States, and the emphasis on rigorous education in their families' home countries (Macias, 1993) may contribute to the pressure placed on Asian American students.

Sun's (1998) study reported some Asian American students feel a "pushing effect" from expectations of family, friends, and educators (Sun, 1998, p. 436). The study examined data on 21,924 students from the NELS-88, and used various analytical strategies to establish differences in performance and investment among races (Sun, 1998). The study also presents a cohesive model for understanding racial differences in educational performance, which has served as a framework in over 80 studies. Sun's (1998) findings suggest Asian families are more invested in financial, human, cultural, and social capital than other races, even after controlling for social or demographic factors, and tend to put pressure on children to be academically successful. It also showed that parental pressure has a significant impact on student performance (Sun, 1998). For such students, it may not be necessary, or even healthy, to receive further pressure from

teachers who may believe in the model minority myth.

Existing pressure regarding academic expectations from others. Asian students also perceive higher aspirations for their educational futures from teachers and friends than peers from other cultures do (Cheng & Starks, 2002; Wong, 1980). Cheng and Stark's (2002) study also suggests Asian American students feel enough pressure from their parents. The study, based on NELS-88, examined race and reported beliefs of 20,840 students, and examined how students' relationships impacted their academic expectations (Cheng & Starks, 2002). The findings establish that teachers, relatives, and peers' expectations, and racial differences, impact students' educational aspirations, and reveal the following: (1) Non-White parents hold higher educational aspirations for their children than White parents, and (2) students of some races are more likely to perceive higher educational expectations from teachers than others (Cheng & Starks, 2002).

Existing pressure to conform to the model minority stereotype. Asian American students may already face a pressure to try and conform to the model minority stereotype (Leong, Chao, & Hardin, 2000). In particular, high performing Indian American and Asian American students may already face immense pressure to perform well academically (Cheng & Starks, 2002; Kao, 1995; Macias, 1993; Wong, 1980). These students may face family pressure, as their parents may simply "expect their children to get high grades" (Ogbu & Simons, 1998, p. 177), and they may associate success in school with their families' "honor" (Blair & Qian, 1998, p. 371). Some of the students may even feel a sense of responsibility or guilt for "sacrifices" their families may have made for them to attend school in the United States (Lee, 2004, p. 417). With the

immense cultural and familial pressures to perform well academically that many Asian students already face (Blair & Qian, 1998; Cheng & Stark, 2002; Lee, 2004; Ogbu & Simons, 1998; Sun, 1998), the added pressure brought on by teachers' high expectations and beliefs may unfairly compound this pressure and become harmful.

Impact of model minority myth on school culture. Lee's (2004) paper examines data collected in a larger ethnographic study on the development of 2,050 Asian American high school students' identities, as well as participant observations, surveys, interviews, and analysis of site documents. The findings suggest various Asian subgroups differ in identities, perceptions and attitudes regarding future performance, and factors influencing these (Lee, 2004). Significantly, the paper finds that students from some Asian American subgroups may see themselves as superior to other groups; this suggests the model minority myth may have negative impacts on student dynamics and school culture. Lee's (2015) book also demonstrates the negative impact of teachers' perceptions of Asian American students as model minorities on the school community as a whole, and suggests the stereotype "promotes interracial tension between Asian Americans and other groups," including other minority groups and students of color, and White Americans (Lee, 2015, p. 2). These findings are consistent with those reported by Leong, Chao, and Hardin (2002), which suggest the model minority myth creates divides between Asian Americans members of other minority groups.

Because discrimination against Asian Americans may not often be discussed, when Asian Americans do face bias, they may lack the social or cultural tools or resources to challenge racial discrimination that tend to exist for cultural groups who face

discrimination in a more visible way (O'Brien, 2008). O'Brien's (2008) book, which relies on in-depth interviews with diverse individuals from ethnic minority groups, predominantly discusses the experiences of Asian Americans and Latinos in the United States. The work examines the framing of their own identities, and their perceived isolation from other races (O'Brien, 2008). The experiences shared in this work have implications for the influence of the model minority myth on school communities and culture, by suggesting that the stereotype may inform Asian American students' perceptions of their racial groups in relation to others, and of themselves.

Limited literature on South Asian Americans. The model minority myth may also have the damaging effect of discouraging researchers from studying challenges faced by this group, as well as of making this group's problems and difficulties less visible compared to other groups that are seen as more disadvantaged (Leong, Chao, & Hardin, 2000). Further, while there does exist literature on the culture, experiences, and perceptions of Asian Americans in school, most literature does not focus on experiences or histories of South Asian Americans specifically. Schmid's (2001) study is one of few that does examine beliefs of Indian American students specifically, and Rahman and Paik's (2017) study is a unique examination of historical and sociocultural contexts of South Asians' immigration and education experiences. However, there is an overall lack of literature in this field, which likely impacts South Asian Americans' experiences.

Because existing research tends to group all Asian American students together (Blair & Qian, 1998), educators may not recognize the reality: there is significant variation in academic achievement and behavior among distinct Asian cultures (Lee,

1994; Ogbu, 1987). Further, while there is valuable discussion of the long history of Asian Americans in the American education system (Hirschman & Wong, 1986; Macias, 1993), there is little discussion of South Asian Americans experiences with education in America specifically. On the school level, educators should be proficient in supporting the academic growth and needs of students from all backgrounds (Nieto, 2013), so that all students can advocate for themselves in school, and achieve their potential for academic success. However, given the overall lack of research on South Asian American students, possibly, educators are not sufficiently culturally proficient in supporting these students.

The lack of literature on South Asian American students may result in an absence of professional development in understanding the culture or needs of these students, which may limit educator cultural competence, including teachers' ability to use cultural knowledge in instruction and support of students, which helps students build better socio-emotional relationships (Gay, 2010; Hammond, 2014). This is problematic, because while high cultural competence enables teachers to develop "fluid and equitable" relationships with their students, and create a "bond" with their students (Ladson-Billings, 1995, p. 163), a lack of cultural competence may inhibit such bonding, which is important for student experiences and outcomes (Klem & Connell, 2004; McNeely & Falci, 2004). Thus, the lack of literature on South Asian American students impacts students directly. Further, the tendency of teachers to hold stereotypical beliefs about these students may even be damaging to the students themselves (Li, 2005; Parks & Kennedy, 2007; Yang, 2004). Like all cultural groups, there is variation in the needs and abilities of Indian American students, and some students may not receive necessary

academic support if teachers lack the cultural competence to recognize their diverse needs. Existing studies highlight the negative impact of low cultural competence on low-performing students (Li, 2005), and suggest possible negative impacts for high performing students (Cheng & Starks, 2002; Kao, 1995; Macias, 1993; Wong, 1980).

Teachers' Low Cultural Competence

The limited literature on South Asian Americans, and Asian Americans more broadly, may contribute to a lack of professional development training focusing on improving teachers' cultural literacy and proficiency in supporting students from these groups. However, being aware of student diversity, including cultural background, and recognizing that students' identities are complex, is a hallmark of a critically reflective teacher (Brookfield, 1995). Further, teachers have an ethical duty to be culturally competent (Ladson-Billings, 1995; Nieto, 2008), understand their students' needs (Nieto, 2013), and provide them culturally responsive instruction and support (Hammond, 2014), because cultural competence has a significant impact on student experiences and outcomes (Guerra & Nelson, 2007; Klem & Connell, 2004; McNeely & Falci, 2004). This sort of cultural awareness and sensitivity is necessary for teachers to be effective in multicultural environments (Ponterotto, Baluch, Greig, & Rivera, 1998).

However, teachers may have varying levels of multicultural awareness and cultural competence (McAllister & Irvine, 2000), may have biases (Pedersen, 2000; Ponterotto, Baluch, Greig, & Rivera, 1998; Valencia, 1997) or believe in stereotypes (Chang & Sue, 2003; Lee, 2004; Li, 2005; Parks & Kennedy, 2007; Wong, 1980), all of which harm students. Teachers have an ethical responsibility to be culturally proficient

(Gay, 2002; Hammond, 2014; Ladson-Billings, 1995; Nieto, 2013), since their proficiency can impact student experiences and outcomes greatly (Guerra & Nelson, 2007; Klem & Connell, 2004; McNeely & Falci, 2004). Further, they should be more than merely knowledgeable, tolerant, or accepting of students' cultural backgrounds (Nieto, 2008). In addition to having knowledge and understanding of their students' specific backgrounds and cultures, teachers must also affirm students' cultures, and be able to incorporate them into their curriculum and pedagogy (Nieto, 2008, 2013).

Indian American students, like all students, need teachers to understand their particular cultural characteristics and perspectives (Gay, 2010), and are best supported when their teachers are highly culturally proficient (Hammond, 2015). However, because of beliefs teachers may hold, teachers may give these students less support than they might benefit from receiving.

Culturally responsive teaching (CRT). Cultural competence, which leads to culturally relevant or responsive teaching (CRT) is a basic responsibility of effective teachers (Gay, 2002; Ladson-Billings, 1995), and is necessary in order to serve all students well (Hammond, 2014; National Education Association, 2015). It is necessary that teachers understand, tolerate, accept, and respect the diversity of their students, and ultimately affirm and stand in solidarity with them and their differences (Nieto, 2008). CRT helps validate and empower diverse student groups (Santamaria, 2009); all students need and deserve culturally competent teachers to provide CRT (Hammond, 2014), including the highest and lowest performing Indian American students.

Ladson-Billings' oft-cited work on the importance of cultural competence and

culturally responsive teaching argues that "culturally relevant" pedagogy is essential to the academic success of all students whose needs have been, in some way, underserved by the school system (Ladson-Billings, 1995). The research examines existing findings on schools and culture and delves into a three-year study of successful teachers of African American students, in order to illustrate desirable culturally relevant teaching strategies (Ladson-Billings, 1995). While the work primarily prescribes culturally relevant teaching as essential for African American students, and other traditionally underserved student communities, it has come to provide a standard for best practices in cultural competent teaching for all student groups. Like Ladson-Billings' (1995) work, Nieto's (2013) book also presents cultural proficiency as the ethical duty of educators, and prescribes best practices for teaching students from diverse backgrounds. Nieto advises knowing students' backgrounds, understanding students' cultures, and being able to incorporate students' cultures into instruction (Nieto, 2013). Notably, Nieto is an award-winning author and educator, and current professor of language, literacy, and culture, and has written extensively on multicultural education and diversity in education.

Nieto's (2008) work serves as a guide to the various levels of multicultural education support that may exist in an educational environment. It outlines five basic levels that educational practitioners and their communities may be characterized as: monocultural, tolerant, accepting, respectful, and finally, one that is affirming, provides solidarity, and encourages self-reflection and critique (Nieto, 2008). Nieto's (2008) work acknowledges that the last level, which educators ought to strive for, may be difficult to reach, and will require ongoing effort and time, but insists that it is a worthy cause.

Zaretta Hammond's (2014) book opens with a discussion of the negative impact of low cultural competence, positing that low teacher cultural competence leaves students of color and minority groups "in a state of disconnect," and establishing that educators must provide culturally responsive instruction and support to students (p. vi). This is important since learning characteristics are "to some extent culture specific" (Banks, 2015, p. 124). Hammond (2014) suggests that culturally responsive teaching is the only way to mediate learning for diverse students who have different learning and support needs, since it allows teachers to be able to recognize students' "cultural displays of learning and meaning making" to adjust their teaching to that student (Hammond, 2014, p. 15). Teachers must "respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new concepts and content" (Hammond, 2014, p. 15) in order to best support diverse student populations. In particular, there is a focus on understanding that the teacher's cultural competence plays a large role in students' achievement outcomes (Hammond, 2014), which has significance for understanding the impact teachers' low cultural proficiency in Indian American students' culture. The work also relies on recent neuroscience and neuroeducation findings in order to present a brain-based approach to providing diverse students culturally responsive instruction and support (Hammond, 2014).

Further, teaching practices that "pay close attention" to students' diversity and "pay close attention to differences" that are "inherent" to that diversity are best for the students (Santamaria, 2009, p. 241). Santamaria's (2009) case studies in two elementary schools with high performing CLD populations suggested that CRT practices promote

learning for diverse learners. The study examines differentiated instruction (DI) as a mechanism for reaching CLD learners, and found that CRT is "validating, comprehensive, multidimensional, empowering, transformative, and emancipatory" for diverse students (Santamaria, 2009, p. 235).

Teachers' biases and tendency to stereotype. Teachers may unintentionally engage in stereotypical thinking and prejudging (Chang & Sue, 2003; Parks & Kennedy, 2007). Teachers may have positive relationships with South Asian American students, but may continue to see them as a typical "Asian American 'model minority,'" who is pleasant, stays out of trouble, and is academically successful, but is "rather dull on a personal level" (Harpalani, 2009, p. 77).

Chang and Sue's (2003) study, for instance, demonstrates that even for student groups teachers tend to perceive as successful, teachers may still hold harmful stereotypes. The study examined how 197 teachers' race biases impacted assessments of children; each teacher was presented with three scenarios, paired with a photograph of an African American, Caucasian, or Asian American child, and asked to rate various dimensions of their abilities and traits (Chang & Sue, 2003). Notably, while the results did not reveal bias in the ratings of the African American or Caucasian children, they did in the case of Asian American children. Asian American children were perceived as possessing more, as Chang and Sue (2003) phrase it, overcontrolled traits, than their peers of other races. These traits include anxiety and worry, shyness, a desire to please, a fear of making mistakes, a need to be perfect, being "too neat," and clinging to adults (Chang & Sue, 2003, p. 237). The findings suggest stereotypes do, in fact, exist in

teachers' perceptions and frameworks of Asian American students (Chang & Sue, 2003).

In a study with findings similar to those of Chang and Sue (2003), Parks and Kennedy (2007) examine how teachers and college students majoring in education perceive K-12 students of different races, levels of physical attractiveness, and genders, and finds that these factors impact how raters perceive the students' academic and social competence (Parks & Kennedy, 2007). Parks and Kennedy (2007) examined participants' (n = 72) assumptions about children's abilities based on non-academic factors. The study showed participants pictures of children of differing genders, races, and pre-determined levels of physical attractiveness, and had them provide ratings of students' competence. Using a mixed factorial design to examine responses, they found race, as well as lower levels of attractiveness, negatively impacted perceptions of students' competence (Parks & Kennedy, 2007). They also found that results did not differ based on teachers' education level (Parks & Kennedy, 2007).

While there are negative implications of assuming a student of a particular race or attractiveness is less capable than other students, even "so-called 'positive' stereotypes" may also have negative implications and consequences as well (Chang & Sue, 2003, p. 235). For students who are presumed to be more capable than they really are, they may receive less support than they need. Findings of both studies imply that there is room for improvement, since they suggest teachers often engage in stereotyping, which may harm students (Chang & Sue, 2003; Parks & Kennedy, 2007).

Impact of lack of existing literature on teacher beliefs. The tendency for researchers to overgeneralize in the existing research on Asian American students may

contribute to the tendency of educators to believe in stereotypes, or overgeneralize about groups. This is problematic, because in order to support multicultural classrooms, and build strong socio-emotional relationships with students, teachers must be able to recognize the "cultural displays of learning and meaning making" of all their students, and then adjust their instruction and teaching methods to fit those students' needs (Hammond, 2014, p. 15). Teachers must be able to use the "cultural characteristics, experiences and perspectives of ethnically diverse students as conduits for teaching more effectively" (Gay, 2010, p. 106). This allows them to "respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new concepts and content" (Hammond, 2014, p. 15). Further, teachers must understand students' backgrounds and cultures, and be able to incorporate that knowledge into their curriculum and pedagogy (Nieto, 2013). By overgeneralizing about cultural groups, and without understanding a particular students' culture, they cannot provide such responsive instruction; lacking cultural competence about a group may prevent teachers from providing students appropriate opportunities and experiences.

Impact of low cultural competence on student experience. In a culturally and linguistically diverse learning environment, it is important, even for high achieving students of color or minority backgrounds, to have positive relationships with their teachers; high cultural competence tends to improve these relationships (Hammond, 2014). Two key studies demonstrate the impact of improved relationships on students' experiences (Klem & Connell, 2004), and health outcomes (McNeely & Falci, 2004), thus demonstrating, albeit indirectly, the value of cultural competence. A discussion of

these studies follows.

Klem and Connell's (2004) study examines how teacher-student relationships and teacher support impact student achievement. The study relies on a reduced version of the Self-System Process Model developed by Connell, and demonstrates that teacher-student relationships, in which the student perceives a high degree of teacher support through a strong student-teacher relationship, may contribute to improved student engagement, and improved student success (Klem & Connell, 2004). While the study does not examine cultural competence directly, it does focus on teacher-student relationships, and because teachers are better able to build such relationships when they have high cultural competence, and a deeper understanding of students' cultures (Hammond, 2014), the findings are or particular importance. The study suggests teachers who develop caring and supportive interpersonal relationships have students who report more positive academic attitudes and values, as well as higher satisfaction with school (Klem & Connell, 2004). Findings suggest support from strong teacher-student relationships is critical to students' connectedness to school, and overall experiences in school. Given that high quality teacher-student relationships improve student outcomes, and that high cultural competence improves teacher-student relationships (Hammond, 2014), it follows that improved teacher cultural competence might improve student academic outcomes.

McNeely and Falci's (2004) study examines how various measures of school connectedness, including teacher support, impact students' likelihood to engage in health-risk behavior. Thee measures of school connectedness and teacher support focus on students' experience of belonging; three of these six questions measured social

belonging, while another three asked about perceptions of teachers as related to their fairness, their tendency toward conflict with the individual student, and about how much or little the respondent felt teachers cared about him or her. This study demonstrates that social belonging, and teacher emotional support and empathy, are associated with students' decreased involvement in health-risk behavior. While the study does not explicitly examine cultural competence in this decrease (McNeely & Falci, 2004), it is reasonable to imagine high cultural competence is critical to teacher emotional support, given that it is directly improves teachers' ability to understand students' needs (Gay, 2010; Nieto, 2013), and build relationships with them (Hammond, 2014).

Impact of low cultural competence on student support. Like all students, South Asian American students need academic support from teachers, including in the form of executive functioning and organizational skills support (Bakunas & Holley, 2004; Boller, 2008). Executive functioning refers to high level neurological processes related to the frontal lobe that direct and organize behavior, and executive functioning skills include organization skills such as planning, time management, self-monitoring, behavioral regulation, self-monitoring (Boller, 2008), and organizing behavior (Bakunas & Holley, 2004). Improving these skills can improve student behavior, emotional self-regulation, and prospects for success (Tough, 2013). While executive functioning skills mature in young adulthood, they begin to develop when students are middle-school age; thus, teacher support in building these skills is essential for all students' developmental learning (Boller, 2008), including Indian American students. However, because teachers may tend to see Indian American students as needing less support than their peers, they

may be inclined to provide less executive functioning skills support to these students, which can be harmful to their academic achievement.

Bakunas and Holley (2004), in their guide to teaching organizational skills to middle and high school students, establish the importance of providing students with these skills, as well as strategies for supporting students in developing them. Providing students support in executive functioning skills such as organizational skills to organize both their physical supplies, as well as their behavior, should be a task for all middle and high school teachers (Bakunas & Holley, 2004, p. 92). While elementary school teachers often teach organization skills to students, teachers of middle and high school students "should never assume that their students can organize" (Bakunas & Holley, 2004, p. 92). Yet many teachers do not provide such support to their students, even though from a developmental perspective, teaching organizational skills is essential (Boller, 2008). It is feasible to imagine this is truest for students that teachers perceive as model students. Given that teachers may imagine Indian American students need less support than peers of different cultural backgrounds, there is a need for proficiency trainings to emphasize the importance of providing all students with these supports.

Boller, who comes from a psychology and education background, presents a discussion of organizational skills from a developmental perspective in an article intended for middle school teaching practitioners (Boller, 2008). Boller's work refers to existing literature on the importance of organizational skills in adolescent development, and refers to educational psychology literature, and work on best practices for teaching and supporting the development of organization skills in middle school students (Boller,

2008). This leads into a discussion of potential strategies for supporting students' organizational skills. Key strategies include: providing oral directions, providing visual cues, explicitly teaching planning skills, and modeling first steps of a task (Boller, 2008).

Need for Further Exploration

The lack of research on Indian American students, and its implications for teacher beliefs, warrants further exploration. The next step in the research is to determine what teachers actually believe about Indian American students. It is important to examine teachers' confidence about their proficiency, and their confidence in providing academic support to Indian American students. It is also important to determine if they believe the model minority myth, or imagine Indian American students need little academic support. Finally, it may be worth examining whether a relationship exists between their cultural proficiency, and the level of support they imagine these students need.

Research questions. The existing literature illuminates four key questions:

1. How confident are teachers in their ability to support Indian American students?
2. How proficient in Indian American students' culture are teachers?
3. How much support do teachers imagine Indian American students need?
4. What is the relationship between how much support teachers imagine these students need, and their proficiency related to Indian American culture?

These four questions, which may be examined more closely as variables, require exploration through an initial exploratory study.

Exploratory Study to Assess Need

The problem has been demonstrated through preliminary data collection. Key documents in this report include:

1. Appendix B: Recruitment Letter for Exploratory Study
2. Appendix C: Exploratory Study Participant Consent Form
3. Appendix D: Exploratory Survey Instrument

Goals and Objectives of the Research

The research questions inspired by the existing literature, as well as observations, by the researcher include the following:

1. How confident are teachers in their ability to support Indian American students?
2. How culturally proficient in Indian American students' culture are teachers?
3. How much support do teachers imagine Indian American students need?
4. What relationship exists between how much support a teacher imagines these students need, and that teacher's cultural proficiency related to Indian Americans?

Discussion of research questions. The first research question seeks to examine teachers' self-efficacy in supporting Indian American students, by examining how teachers rate their own ability to support those students in terms of confidence and preparedness. The second research question seeks to examine how culturally competent or proficient, regarding Indian American students, teachers rate themselves. Examining

this question may also help in determining whether teachers' confidence in supporting them is related to their cultural competence. The third research question seeks to determine how much support teachers imagine their Indian American students need.

The fourth and final research question seeks to explore the relationship between teachers' cultural competence or proficiency regarding Indian American students and how much support the teacher imagines these students need. Answering this research question may inform whether teachers believe the model minority stereotype about Indian American students, and believe their Indian American students need little support. This study aims to better understand teachers' perceptions of their own competence and preparedness in supporting Indian American students, and ultimately, to explore how these factors influence how much support they imagine Indian American students need. The four research questions illuminated by the existing literature must be examined as variables, as they require exploration through an initial exploratory study. Table 1 identifies the key variables and indicators for this assessment.

Table 1

Key Variables and Indicators

Variables	Indicators
Teacher confidence in ability to support Indian American students	Teachers' self-reported level of confidence or preparedness in providing academic support to Indian American students
Teachers' culturally competence or proficiency regarding Indian American students	Teachers' levels of self-reported cultural competence or proficiency regarding Indian American students
How much academic support teachers imagine Indian American students need	Teachers' self-reported measure of how much academic support Indian American students need, as compared with other cultural groups
Relationship between teachers' cultural competence or proficiency regarding Indian American students and how much support the teacher imagines these students need	Examining the correlation between teachers' self-reported cultural competence or proficiency regarding Indian American students and teachers' measure of how much support they imagine Indian American students need

It is important to note that this exploratory study measures teachers' cultural competence or proficiency by using teachers' self-reported score on a seven-level Likert-like scale for how much they knowledge they have about a particular student groups' cultures or related needs. Study participants were given the same definition for cultural competence as is used by the study prior to being asked the related questions.

Data Collection Methodology

Desired participants for the study were current middle or high school K-12 teachers in the United States, who work with Indian American students. 15 participants were recruited through social media networks using recruitment letters (Appendix B);

eligible participants provided digital consent through an anonymous consent form (Appendix C) preceding the research instrument (Appendix D). The study consisted of an online survey for middle and high school teachers who work with Indian American students, about their self-efficacy, cultural competence, and ability to provide self-advocacy skills training and academic support.

A basic quantitative questionnaire with closed-ended questions (Appendix D) was utilized for addressing the research questions. The instrument relied on a Likert-like scale with the recommended seven levels, rather than the standard five (Dawes, 2008). The instrument included a note asking participants to think carefully about their responses to reduce the threat of satisficing, and to improve response quality and reliability (Schutt, 2012). The questionnaire (Appendix D) was administered through the Google Forms online platform, and responses were stored in a password-protected spreadsheet. Responses were solicited using online chain referral snowball sampling, and the link was initially shared through the researcher's own website, the researcher's own Facebook and LinkedIn networks, and the researcher's public Twitter account.

Exploratory Study Findings and Analysis

Survey participants reported some interesting findings that addressed the four research questions initially posed. This section includes analyses of each of these research questions, which were addressed through examining means, standard deviations, and in some cases, Pearson's Correlation Coefficient analyses. Each section begins with a research question followed by the statistical analysis findings that answer it.

Teacher Confidence in Supporting Indian American Students

Participants were asked to report how confident or prepared they felt in supporting different cultural groups in order to develop a baseline, and to address the first research question, "how confident are teachers their ability to support Indian American students?" 73.3% of participants reported being comfortable to extremely comfortable supporting their needs, with the average self-reported score of comfort $\mu = 5.2$, on a scale of 1-7 ($SD = 1.5$). The findings suggest teachers feel confident and prepared to support Indian American students.

They tended to be less confident in their ability to support Hispanic students, with 60.0% of participants indicating they were confident ($\mu = 4.4$, $SD = 1.6$). They were even less confident in their ability to support Black/African-American students, with only 53% of participants indicating they were confident in supporting them ($\mu = 4.53$ out of 7, $SD = 1.2$). In contrast, nearly 90% (86.7%) of participants reported being confident to extremely confident in supporting White/Caucasian students ($\mu = 5.7$ out of 7, $SD = 1.0$), and 73.4% reported being confident to extremely confident in supporting Asian American students ($\mu = 5.07$ out of 7, $SD = 1.0$), as well as Indian-American students ($\mu = 5.3$ out of 7, $SD = 1.0$). Table 2 provides comparisons of teacher confidence by student background.

Table 2

Teacher Confidence in Supporting Students of Different Backgrounds

Student's Background	Not Confident	Neutral	Confident
A	6.7%	20.0%	73.4%
B	26.7%	20.0%	53.3%
H	26.7%	13.3%	60.0%
I	0.0%	26.7%	73.4%
W	6.7%	6.7%	86.7%

Note. A=Asian American; B= Black/African-American; H=Hispanic; I=Indian-American; W=White/Caucasian

Participants reported they were fairly confident in their skills in supporting White/Caucasian students (M = 5.7 out of 7, μ 1.0), which may be explained by the sample's high level of self-reported understanding of the culture and cultural norms of their American students of any race (μ = 5.6 out of 7, SD = 1.0).

However, participants also reported they were fairly confident in their ability to specifically support the needs of Indian American students, rating their confidence in supporting these students even more highly (μ = 5.3 out of 7, SD = 1.0) than their confidence in supporting the needs of most students, irrespective of race or culture (μ = 5.2 out of 7, SD = 1.5). This is unexpected, given that participants reported being not being particularly proficient in Indian American culture and cultural norms of Indian American students; their self-reported cultural competence was fairly neutral (μ = 4.1 out of 7, SD = 1.2).

Teacher Cultural Competence Regarding Indian American Students

Much of the data was valuable in answering the second research question, "how culturally competent or proficient are teachers regarding Indian American students?" This question was primarily addressed by asking participants to report cultural competence by indicating how well they understood the cultures and cultural norms of various groups. Participants reported they understood the culture and cultural norms of American students of all races fairly well, with almost 87.0% of participants reporting they understood the culture or norms (μ = 5.6 out of 7, *SD* = .9). Their proficiency in Asian or Indian cultures was lower; less than half of participants reported being proficient in their understanding the culture and cultural norms of Asian American students (μ = 4.3 out of 7, *SD* = 1.2) or Indian American students (μ = 4.1 out of 7, *SD* = 1.2). Thus, findings related to the second research question, indicate teachers tend not to be highly culturally competent or proficient regarding Indian American students. This finding is most interesting in light of their high confidence in supporting this group. Table 3 provides comparisons of teachers' self-reported cultural proficiency by student background.

Table 3

Teacher Cultural Proficiency for Students of Different Backgrounds

Student's Background	NP	Neutral	P
A	20.0%	33.3%	46.6%
Am	0.0%	13.3%	86.7%
I	26.6%	26.7%	46.7%

Note. A=Asian American; Am=American (any race); I=Indian-American; NP=Not Proficient/low level of understanding; P=Proficient/High level of understanding.

Imagined impact of improved cultural proficiency. Participants were also

asked to identify any groups they felt they might benefit from learning more about after reflecting on their current cultural proficiency; by far, Indian American students were the group that participants most felt they could benefit from learning about, with nearly 90% (86.7%) selecting them. The next most selected groups were West African students, with 73.3% of participants expressing that they would benefit from learning more about them, and Black/African-American students, Hispanic/Latin-American students, and East African students, with 53.3% of participants expressing that they would benefit from learning more about them.

Of those surveyed, about half (53.0%) indicated they imagined they would be better able to support Indian American students if they better understood their culture. An additional 40.0% of participants were neutral, and considered that it was possible that learning more about Indian American students might enable them to better support these students. Only 6.7% of participants said learning more about Indian American students would not enable them to better support them. Further, 80.0% of participants indicated they would be better able to support Indian American students if they understood their unique needs better, and of the remaining participants, 13.0% were neutral, and thus open to the possibility; only 6.7% said better understanding the unique needs of Indian American students would not better enable them to support the students.

Teacher Perceptions of Indian Americans' Support Needs

Participants were asked about how much academic support they imagined various cultural groups needed in comparison to others in order to explore the third research question, "how much support do teachers imagine Indian American students need?" In

response to this question, the findings suggest that teachers do not imagine their Indian American students need a high amount of support, as compared with other cultural groups; 60.0% of participants indicated that Indian American students likely need less support than do other groups. The findings indicate a belief that Black and Hispanic students tend to need more support than other groups, and that White, Asian American, and Indian American students need less support than other groups. Table 4 provides comparisons of how much support teachers indicated different cultural groups needed, as compared with others.

Table 4

Teacher Perception of Support Needs of Students

Student's Background	Need less support than other groups	Need same amount of support as other groups	Need more support than other groups
A	73.3%	26.7%	0.0%
B	6.7%	13.3%	80.0%
H	0.0%	26.7%	73.3%
I	60.0%	26.7%	13.3%
W	60.0%	33.3%	6.7%

Note. A=Asian American; B= Black/African-American; H=Hispanic; I=Indian-American; W=White/Caucasian

Cultural Competence and Perceived Support Needs

The fourth and final research question explored in the data collection was "what is the relationship between teachers' cultural competence or proficiency regarding Indian American students and how much support the teacher imagines these students need?" In response to this question, the findings indicate that when teachers have higher cultural

competence regarding Indian American students, they tend to believe those students need more support than if they have low cultural competence. Results using Pearson's Correlation Coefficient indicate that higher levels of self-reported cultural competence related to Indian American students is positively correlated with believing Indian American students need more support, where $r(13) = .53$, $p < .05$. Conversely, lower teacher cultural competence for Indian American students tends to be correlated with believing these students need less support. They tend to acknowledge students' need for support as they become more culturally competent; the result was significant.

These findings may suggest that with lower cultural competence or proficiency, teachers are more likely to believe the model minority stereotype about Indian American students, and assume that their Indian American students need less support. It is reasonable to imagine that this belief might impact their teaching practices, thus leading them to provide their Indian American students with less academic support.

Exploratory Interview and Findings

In an effort to gain further insight into the findings of the exploratory study, the researcher conducted an informal interview (Appendix E provides a full transcript of this interview) with four teachers about Indian American students, cultural competence, and cultural competence training. The interview was based on a Design Thinking model developed and recommended by the Stanford University Institute of Design (2014). The approach involved inviting innovators with varied viewpoints for the purpose of "radical collaboration" (Stanford University Institute of Design, 2014, p. 3). Questions focused on experiences working with Indian American students, cultural competence, and ideas for

how to improve teachers' cultural competence regarding Indian American students.

Selected comments from the interview participants highlight the idea that low cultural competence regarding Indian American students may be harmful:

- One teacher stated: "None of the kids fit the [expletive omitted] stereotype."
- Teachers indicated that belief in a stereotype is "damaging to the kids who obviously don't [fit it]" and that "It's damaging… to think it's okay to have some particular belief about a group."
- One teacher admitted to feeling surprise when an Indian student is in a supported class.
- One teacher indicated that teachers know very little about Indian American students: "What the hell do we know about Indian students? Not much."
- Teachers may tend to be aware of their own tendency to stereotype and belief in the model minority myth, and feel they need "help… to stop stereotyping."

These selected comments help demonstrate that Indian American students are negatively impacted by the model minority myth, teachers' low cultural competence, and on a larger scale, by the lack of literature on Indian students in general, which may be to blame for the smaller-scale problems.

Summary

The lack of research on Indian American students, and its implications for teacher beliefs, warranted an initial exploratory survey examining teachers' beliefs regarding Indian American students. The findings of this survey confirmed that teachers do see their Indian American students as high achievers, thus aligning with the model minority belief, and tend to self-report low levels of competence in supporting these students.

The preliminary data collection in this exploratory report demonstrates that teachers tend to be fairly confident in their ability to support Indian American students, with 73.0% indicating they were confident. This could be explained if participants also indicated they had high proficiency in Indian American culture, but the participants tended not to report being proficient in Indian American culture; in fact, less than 50% of participants indicated they understood the culture and cultural norms of their Indian American students, compared with nearly 87% of participants who felt they understood the culture and cultural norms of their American students. This itself is a problem, but the problem is magnified by the fact that in spite of not feeling proficient in Indian American culture, the teachers feel, perhaps inappropriately, confident in supporting them, in spite of seemingly believing the model minority myth. The tendency of many Indian American students to perform well academically might serve as a misleading form of positive feedback to teachers, leading them to imagine these students' performance is due, at least in part, to effective teaching. However, the high performance of some Indian American and other South Asian American students' high performance may not be due to teachers' effectiveness, but may actually exist in spite of low cultural competence.

Since teachers are confident supporting Indian American students, but tend not to have high proficiency in their culture, it is possible they overestimate the effectiveness of their teaching methods as related to these students. They may engage teaching practices not well suited to these students, and may not provide students with academic support they may need. Teachers' confidence in supporting Indian American students may come from a mistaken belief that the students need little help, or fit the model minority stereotype. Thus, low cultural competence might impact the students, as teachers may not provide them with necessary support. Participants indicated they could benefit most from learning more about Indian American students' culture, and over 90% of participants indicated they would be or might be better able to support Indian American students if they better understood their culture. The same percentage said they would, or might be able to, better support them, if they had a deeper understanding of their needs. Thus, teachers themselves recognize the value in better understanding Indian American culture.

Further, teachers reported believing Indian American, Asian American, and White students tended to need less support than other groups. This finding may suggest teachers do tend to believe the model minority myth about their Indian and Asian students (Wong, 1980), and imagine these students as needing less support. Possibly, this leads them to act on this belief, and possibly offer these students less support as a result.

Finally, teachers who had higher cultural competence regarding Indian American students' cultures tended to believe those students needed more support than did teachers with lower cultural competence. Teachers' levels of self-reported cultural competence were positively correlated with a belief that Indian American students need more support

(statistically significant at $p < .05$). This may suggest that as teachers better understand Indian American students, they become more aware of their support needs. Since teachers seem to recognize to students' support needs better as they better understand Indian American culture, improving teacher cultural competence may be a valuable step in improving how supported Indian American students are by their teachers.

Next Steps

There is a need to examine the nature of the impact that teachers' low cultural competence, as evidenced by demonstrated belief in the model minority myth, regarding Indian American students, has on the students themselves. Presumably, this low cultural competence extends beyond Indian to other South Asian American students, and as such, further research must examine the experiences of all South Asian Americans. Such a study could establish the experiences and needs of these students, which could then later be used to inform professional development for these teachers. If such an impact is found to be harmful, the next step would be to find ways to mitigate the impacts of the low cultural competence.

CHAPTER THREE

METHODOLOGY

Introduction

Given that that teachers report having low cultural proficiency in Indian American culture, there is a need to delve into the academic support needs, and the schooling experiences of Indian and other South Asian Americans, in order to better understand the impact of teachers' low competence on the students themselves, and in order to begin developing a framework for understanding these students' culture, needs, and experiences. In order to begin developing such a framework, it is essential to first determine exactly how teachers' low cultural competence impacts the students themselves. An exploratory study of this nature should examine South Asian Americans' academic and executive functioning support needs, their perception of their teachers' cultural competence, and their overall experiences in school.

Study Overview

The study seeks to examine the perceptions of South Asian Americans, as related to the support they received, and as related to their overall experiences in school, especially in context of teachers' low cultural competence, through an online survey. The survey instrument was administered to 85 South Asian Americans who attended K-12 education system in the United States, and could recall their experiences in that system. Because the exploratory study in this work included teachers who worked with Indian American students both in Maryland, as well as in other parts of the United States, it was

deemed appropriate not to limit the survey to participants only in the Maryland area, but to expand the survey to include participants from other parts of the country. The survey was administered in late 2016, over the course of three months. Eligible participants were be recruited through various methods, including various organizations and associations affiliated with Indian American and South Asian American groups at colleges and universities, social media sites affiliated with the aforementioned groups, and online advertising through social media.

Assumptions Guiding Research

Some key assumptions guided this research. In addition to the idea that educators value diversity, equality, and progress, which may be reasonably assumed, two other assumptions also inform the research: South Asian Americans may need more support than they receive, and teachers' low cultural competence harms South Asian Americans.

South Asian American students need more support. The first assumption suggests South Asian American students may actually need more academic support than they receive. Many Asian American students do not fit the model minority stereotype (Li, 2005), and may need more help than they tend to receive. Already, teachers may often make "unspoken developmental assumptions" overestimating their students' executive functioning skills (Boller, 2008). Possibly, this is more pronounced for student groups they already perceive as model students. This is supported by a finding of the exploratory study: teachers who self-identified as having higher cultural competence regarding Indian American students tended to also believe those students needed more academic support than did teachers with lower self-reported cultural competence. This may suggest that

higher cultural competence regarding Indian American students may be associated with believing Indian and other South Asian American students need more support.

Low cultural competence is harmful. The second assumption is closely related to the first, and suggests that teachers' low cultural competence and belief in the model minority myth (Lee, 1994; O'Brien, 2008; Wong, 1980; Yang, 2004) may lead them to underestimate South Asian American students' support needs, thus leading them to provide Indian American students with less support than they need. Teachers' low cultural competence may lead them to hold harmful stereotypical attitudes and beliefs (Parks & Kennedy, 2007), such as the model minority myth (Wong, 1980), about their Indian American students, which may lead them to believe these students need less academic support. Further, this perception may prevent students themselves from seeking help when struggling, which may lead to worse academic outcomes than they might otherwise experience (Lee, 2015). The pilot study finding suggesting teachers with low cultural competence might underestimate students' needs also supports this view. These assumptions guide the research, and inform the research questions and design.

Research Gaps

Existing standards from the Department of Health and Human Services (HHS) have allowed Asian American and Pacific Islander communities to be grouped together in data collection involving race and ethnicity, in spite of the diversity of these individual communities (Harris-Kojetin, 2012; King, 2016; White House Initiative on Asian American and Pacific Islanders, 2015). While in recent years, there has been a push to improve data collection (see King, 2016 for a recent initiative to collect data on

individual communities), such that specific subpopulations are identified more clearly, current data on student performance by demographic tends to group Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, and Native Hawaiian and Other Pacific Islanders together (Harris-Kojetin, 2012). This is reflected in the existing literature (Blair & Qian, 1998), on the state level for reporting student data (Maryland State Department of Education, 2016), and on the school district level (Howard County Public School System, 2016; OpenDataMCPS, 2015; R. Low, personal communication, May 3, 2016). Consequently, there is a lack of quantitative tools available for examining the perceived academic support, experiences, and outcomes of Indian American students.

While existing literature indicates teachers tend to believe the model minority myth, about their Asian American students (Chang & Sue, 2003; Cheng & Starks, 2002; Li, 2005; Wong, 1980), and even some discussion of how it impacts Asian American students broadly (Lee, 2015), there is little discussion of how Indian American students perceive this. The exploratory survey establishes that teachers actually have low cultural competence regarding Indian American culture, and while these findings can be indirectly supported by existing literature, little else exists confirming these findings, suggesting a need for further research in this field.

Because there is no existing literature examining the lack of cultural competence or proficiency in supporting Indian or South Asian American students, there is no discussion of how this low competence or proficiency impacts the students themselves. While existing literature does establish the impact that stereotyping has on students (Parks & Kennedy, 2007), and on some of the stereotypes and expectations teachers tend

to hold about their Asian American students (Cheng & Starks, 2002; Wong, 1980), there is little discussion of how these stereotypes impact most Asian American students. Further, while studies also suggest high quality interpersonal relationships between students and teachers results in students' higher satisfaction with school (Klem & Connell, 2004), there is no explicit evidence of how cultural competence impacts the relationships. There is some discussion of the impact of these stereotypes on the lowest performing Asian American students (Li, 2005), but none that directly discuss how the model minority myth harms average-achieving, or high-achieving Asian American students. Further, there is no literature on how the model minority myth impacts Indian American students, at any achievement level. Thus, there is a need to examine how teachers' low cultural competence impacts Indian American students, and to answer the question: what is the relationship between teachers' low cultural competence and students' perception of their academic experiences and support?

In order to answer the questions of how teachers' low competence impacts Indian American students' K-12 schooling experience, both academically, and socially, it is important to consider how the stereotype might manifest in the classroom. For instance, does being an Indian American student of a teacher who believes in the model minority myth lead to being offered help less frequently than White or Black peers? Possibly, teachers' low cultural competence, or belief in the model minority myth, might impact the amount of support Indian American students receive. While all middle and high school teachers ought to help students develop their organizational skills, which are "crucial for student success in school," (Bakunas & Holley, 2004 p. 92) many teachers

may not do this, especially for those students who they may mistakenly perceive as advanced, or as a model student.

Research Questions for Development of Study

Given that the exploratory survey has established teachers' low cultural competence or proficiency in supporting Indian and other South Asian Americans, it is crucial to begin examining how this impacts those students. Based on the gaps in the literature, three primary research questions related to developing the study arise, based on the gaps in the literature: (1) What research instrumentation or approach would be best suited to explore South Asian Americans' K-12 experiences, as related to their teachers' low cultural competence? (2) How many former K-12 students from South Asian backgrounds need to be sampled?; (3) What questions need to be asked of this population? Table 5 includes the research questions related to the development of the survey instrument, and their corresponding explanations.

Table 5

Primary Research Questions and Explanations

Primary Research Questions	Explanations
What approach would be best suited to exploring South Asian Americans' K-12 experiences, as related to their teachers' low cultural competence?	Mixed methods survey instrument including quantitative survey items and constructed response questions (Johnson & Onwuegbuzie, 2004), in the form of a multi-question survey administered to Indian American adults who are former K-12 students
How large of a population of former K-12 students from South Asian American backgrounds needs to be sampled?	The lack of existing data in this field suggests that any sample size would be valuable; however, while the desired ideal sample includes $n = 384$ (O'Leary, 2014), a more realistic goal is to include ~100 participants.
What questions would be asked of this population?	Survey questions based on key research questions have been developed.

Use of survey as ideal research instrument. The first question, which asks about the best approach to collecting information from Indian Americans, is concerned with the fact that it is difficult to access existing findings on this population. Existing studies are very limited for this population, so relying on examining pre-existing literature, instead of conducting an original study, is not an option. An original survey would be the ideal approach to exploring questions relevant to this study. Survey research is a widely accepted research technique in the social sciences, and is one that has gained significant credibility (Rea & Parker, 2014). Survey research can be particularly valuable in conducting original research and gathering primary data (Rea & Parker, 2014), which may be especially valuable since there is currently such little literature on Indian

American students, and the impact of low cultural competence on them.

A primarily quantitative survey design, supplemented by qualitative survey items, is utilized in this study. This design is based on a mixed model outlined by Johnson and Onwuegbuzie (2004) informs the survey development: the instrument will concurrently collect predominantly quantitative data, which can then be examined to identify trends through percentages, along with three qualitative items, which is used to provide deeper insight into the quantitative survey items' findings. A survey instrument that includes primarily quantitative survey items, as well as open-ended constructed responses to specific prompts that may provide greater insight into the research questions, might allow for a pragmatist, mixed methods approach to the study, and allow for deep analysis (Johnson & Onwuegbuzie, 2004). Including qualitative constructed response questions in addition to the quantitative survey items will allow for examination of contextual and setting factors related to the phenomenon being studied (Johnson & Onwuegbuzie, 2004).

Survey findings could allow the researcher to gain insights into how teachers' low cultural competence impact students' experiences and perceptions of teacher support. If the findings help establish how teachers' low cultural competence, impacts Indian American student populations, they could be a valuable contribution to current literature on cultural competency, as well as on Indian American students in education.

Sample size needed. In response to the second question, in order to maximize the validity and generalizability of the study, it is important to aim for as much survey participation as possible (O'Leary, 2014), especially given that existing research on Asian American students tends to rely on small-scale studies, and may consequently be

misleading (Cheng, 2000). Minimal statistical analysis will require at least 30 respondents; however, a larger sample size will yield more generalizable and representative results, and allow for more advanced statistical analysis (O'Leary, 2014).

In order to determine ideal sample size, it is necessary to know the total population the sample size is reflective of (O'Leary, 2014). The population of Indian American students enrolled in a public K-12 school in Maryland, where the majority of recruitment is focused, can be estimated as 11,868 (see Appendix A). Based on this figure (N = 11,868), a confidence level of 95% and a confidence interval of 5, a power analysis indicates the ideal sample size for the survey population includes 372 participants (n = 372). However, this ideal sample size must be checked for "doability" (O'Leary, 2014); given that the research team is made up of only one person, and given a fairly limited time frame available for analyzing the outcomes, a smaller sample size may be more realistic. Using a confidence level of 95%, and a confidence interval of 10, the target sample size for the study is would be 95 (n = 95); the final sample includes 85 participants, bringing it close to this ideal.

Questions to ask participants. Developing original survey items will allow for a research instrument that best addresses the key research questions. A discussion of key exploratory research questions follows.

Research Questions for Exploration into Relationship

Four exploratory research questions seek to better understand the relationship between teacher cultural competence and student perceptions, experiences, and perceived academic support, in the context of their teachers' cultural competence:

1. Do South Asian Americans feel their general academic support needs are met?
2. Do South Asian Americans feel their executive functioning academic support needs are met?
3. Do South Asian Americans perceive their K-12 teachers as culturally competent?
4. How connected to school do South Asian Americans feel?

Philosophical Stance

While quantitative purists assert that social science inquiry should be objective, and educational researchers should be able to remove all bias or emotional attachment from their research (Johnson & Onwuegbuzie, 2004), it is neither realistic, nor desirable to use this approach. In this case, the researcher's own connection to the impacted group suggests an "inherent biasness in the choice of what to study," as her own interests, beliefs, skills, and values influenced the research area (Holden & Lynch, 2004, p. 9), suggesting a value-laden connection. Further, the researcher's belief that the likely negative impact of low teacher cultural competence on Indian American students presents an ethical problem; thus, a strictly quantitative purist approach would be inappropriate. Conversely, qualitative purism relies so heavily on subjective, context-based observation and informal reflection that results may be influenced by the researcher's "personal biases and idiosyncrasies" (Johnson & Onwuegbuzie, 2004, p. 20).

Pragmatism

Pragmatism may be the best approach under which to conduct this research. This approach is both well suited to the nature of the problem, as well as well suited to the predominantly quantitative approach being taken in this research. Further, it may be best

to combine the qualitative and quantitative approaches under a pragmatist approach; this might allow the researcher to use empirical observations to address research questions, provide "warranted assertions" about participants, and pull from qualitative methodology while using a predominantly quantitative one (Johnson & Onwuegbuzie, 2004, p. 15).

Pragmatism allows for the acknowledgment of some culturally derived moral goods, and "takes an explicitly value-oriented approach to research," (Johnson & Onwuegbuzie, 2004), making it an appropriate fit for exploring the issue of whether teachers' low cultural competence harms South Asian American students. The pragmatist idea that "a claim is true if it is useful to believe that claim" allows certain assumptions to guide this work (Shadish, Cook, & Campbell, 2002, p. 35). This is critical, since key assumptions guiding this work include the idea that education practitioners and researchers value equality, diversity, and progress. Pragmatism's endorsement of shared cultural values, including equality and progress (Johnson & Onwuegbuzie, 2004) make it a good fit for this research topic.

Pragmatism may also facilitate mixing research approaches to exploring the research topic and questions appropriately (Johnson & Onwuegbuzie, 2004). The ideology behind this philosophical stance suggests that the "empirical and practical consequences" of ideas must be considered while judging them (Johnson & Onwuegbuzie, 2004, p. 17); thus, this approach is well-suited to examining the real-world, both practical and empirical, relationship between teachers' low cultural competence and Indian Americans' experiences and perceptions.

Instrumentation

A survey instrument consisting of 30 Likert or Likert-type survey items and three open-ended constructed response questions was ultimately developed, and serves as the primary research instrument for this study to examine these research questions. The first two research questions are rooted in the assumption that South Asian Americans receive less support than they need: The first research question requires an examination of the general academic support needs of South Asian Americans, and of whether those needs were met, while the second research question explores the executive functioning support needs of South Asian Americans, and whether those needs were met. These questions were examined through quantitative survey items, and an open-ended response questions.

The third research question examines South Asian Americans' perceptions of their teachers' cultural competence, and is examined through quantitative survey items, as well as one more of the open-ended response questions. Finally, the fourth research question seeks to establish the academic experiences of South Asian American students, especially in context of other research questions (and in particular, in context of their perception of teachers' cultural competence), through quantitative survey items, and an open-ended response item.

The survey was administered to an eligible sample population of South Asian American adults, and consisted of questions aligned with existing literature related to these exploratory research questions, and should aid the researcher in determining what the overall impact of teachers' low cultural competence is on South Asian American students' educational experiences.

Survey Development

While traditionally, survey researchers rely on pre-existing survey instruments and questions to develop surveys (Collins, 2003), existing studies do not provide measures for the research questions explored in this study; consequently, it was necessary to develop an original survey questionnaire for this study. The survey instrument went through many stages of development. First, the four research questions were expanded to develop an initial total of 25 initial Likert items, and three constructed response prompts, for a preliminary survey draft (Appendix F). These survey items were then revised and expanded, based on a multi-stage process to ensure validity.

Key Constructs

The four exploratory research questions guiding the study inform the four key constructs: (1) general academic support, (2) executive functioning support, (3) perceptions of teachers' cultural competence, (4) connectedness to school. Table 6 identifies these key constructs, and their relevant indicators.

Table 6

Constructs and Indicators

Variables	Indicators
General academic support	Teachers periodically stopping to check students' understanding during instruction on new or complex material, and teachers providing additional review opportunities for students (Jones, Jones, & Jones, 2007).
Executive functioning support	Teachers chunking lengthy instructions, monitoring student progress on tasks, reminding students to record due dates and assignments, supporting students in developing time management skills, and providing general support in building organizational support.
Perception of cultural competence or proficiency	Believing teachers have cultural competence: necessary knowledge, literacy, skills, attitudes and beliefs (JohnBull, 2012) about group, such that the person would be able work well with, respond effectively to, and be supportive of people in cross-cultural settings (Gay, 2010; Guerra & Nelson, 2007; Hammond, 2014; Nieto, 2013).
Connectedness to school	Students' overall connectedness to school, especially in context of feeling connected to school and peers; connectedness is positively impacted by strong teacher-student relationships, and being understood by teachers, (Adams & Pierce, 2004; Klem & Connell, 2004; McNeely & Falci, 2004)

General academic support is a key construct, and refers to best practices in teaching, including checking on students while working and providing assistance as needed before moving on, aiding students in preparing for assessments (Jones, Jones, & Jones, 2007). Providing students with academic supports is not only a best practice for teachers (Brookfield, 2015; Jones, Jones, & Jones, 2007), but it may also be a key factor in student achievement (Klem & Connell, 2004). In particular, teachers should support student learning by monitoring student learning and checking for understanding (Jones,

Jones, & Jones, 2007), and by providing support in developing executive functioning skills (Bakunas & Holley, 2004; Boller, 2008).

Executive functioning academic support is another key construct, and refers to help in developing executive functioning skills that are essential for students' developmental learning, and includes supporting students by making information clear and comprehensible, monitoring progress, teaching planning, self-monitoring, time management, and organizational skills (Boller, 2008), and chunking complex (Jones, Jones, & Jones, 2007; Schunk, 2008).

Cultural competence and proficiency in this study are referred to interchangeably, and refer to having the necessary knowledge, literacy, skills, and attitudes and beliefs (JohnBull, 2012) about a particular group, such that the person would be able work well with, respond effectively to, and support people in cross-cultural settings (Gay, 2010; Guerra & Nelson, 2007; Hammond, 2014; Nieto, 2013). Cultural competence would suggest being knowledgeable about student backgrounds, and less susceptible to biases, including the model minority myth. Cultural competence can indirectly improve student experiences and outcomes (Klem & Connell, 2004). Conversely, low cultural competence may be linked to a decreased ability to support students (Hammond, 2014), a belief in harmful stereotypes (Parks & Kennedy, 2007), and negative outcomes for lower performing students (Li, 2005).

Academic experiences are the final key construct, and refer to students' experiences of receiving the same supports as peers from other cultural or racial groups, their sense of being or feeling understood by their teachers, their sense of connectedness

with the school culture and community, and their self-concept in terms of their cultural identity in school. Getting to know students personally positively influences students' motivation (Adams & Pierce, 2004), and consequently, their connectedness to school. Further, strong student teacher relationships have been shown to make students more engaged and successful (Klem & Connell, 2004), improve students' sense of connectedness to school (McNeely & Falci, 2004), and influence students' self-esteem and sense of importance (Adams & Pierce, 2004). It follows that a perceived lack of support might inhibit students' sense of engagement and success, and their sense of connectedness to their experience as students.

These key constructs and their corresponding indicators were used to develop 28 initial survey items. Each of the survey questions in the first draft of the survey questionnaire is supported either directly or indirectly by research (Appendix G provides detailed support, with specific research where relevant, to provide a rationale for each survey item in the initial draft). Of these, 25 were initially grouped into five categories or question types, to serve as composite, Likert or Likert-type scales (Appendix H shows the original scales). These survey items and scales were later revised during the process to ensure validity of the instrument, through a two-stage sorting process to ensure their consistency in measuring the intended concept. The three remaining survey items are open-ended constructed response questions.

Composite Scales

The survey items in this study rely on a modified Likert scale, and include statements with the following response alternatives: (1) strongly disagree; (2) disagree;

(3) agree; (4) strongly agree. While the labels associated with presumed ordinal response alternatives do not generally have much effect on means or total scores (Chang, 1996), it is common practice to include individual descriptors for each Likert item response option (Clason & Dormody, 1994; Mathieson & Doane, 2005). Doing so may providing clear item descriptors for each individual response option, rather than anchors on either end, may also help provide clarity to the researchers who must later analyze the findings (Boone, Staver, & Yale, 2014).

While most of these scales developed follow the traditional recommended format of combining four or more Likert-type items into a single composite variable during data analysis (Boone & Boone, 2012; Clason & Dormody, 1994), two of the scales include fewer than four Likert-type items (Table G1; Table G2), thus serving as modified Likert scales. In the case of each scale, the composite score of the Likert-type items for each variable is key to the data analysis (Boone & Boone, 2012; Clason & Dormody, 1994).

Absence of neutral response. The absence of a neutral mid-point response, is an appropriate variation of the Likert scale (Boone & Boone, 2012; Clason & Dormody, 1994). In order to avoid the tendency of survey respondents to select a neutral response, which can often distort results and decrease reliability of results (Garland, 1991), it is advisable to force a positive or negative response by eliminating the midpoint response option (Rea & Parker, 2014).

Rationale for four-point scale. A four-point scale can be an appropriate variation on the standard Likert scale (Clason & Dormody, 1994). While some research recommends using a greater number of response alternatives than is standard (Dawes,

2008), and a seven-point scale was used in the exploratory research study, it is important to note such recommendations must “make sense” for the specific survey in question, and are not “one size fits all” (Grondin & Blais, 2010, pp. 22-23). Collapsing categories to offer fewer response alternatives can yield straightforward data, and help "improve the quality of fit between data and the model" (Grondin & Blais, 2010, p. 22). In this case, the model seeks to clearly establish the impact of teacher cultural competence on Indian American students, and having more straightforward data might make this more feasible. While there is risk of loss of data regarding the level of agreement or disagreement participants feel regarding a particular statement due to collapsing intermediate categories such as "somewhat and mainly," the clarity in the responses may mitigate this risk (Grondin & Blais, 2010, p. 22).

Response option reversal. In order to improve internal consistency reliability of Likert survey responses, researchers may tend to mix negative questions in with positive to safeguard against acquiescence or unreliable response data (Barnette, 2000). However, because negatively worded items are not always the exact opposite of directly worded items, reliability and validity of the scores on those items is reduced (Barnette, 2000). Thus, an approach in which the stem remains directly worded item and the response options be offered in reverse order may be a more advisable approach to improving internal consistency reliability (Barnette, 2000). Thus, as advised in Barnette’s (2000) study on the impact of mixed response options, approximately half of the survey items will have response items going in a different direction than the other.

Statements. Since presenting Likert items as clear statements is recommended

(Johns, 2010), each item's stem was presented as a statement rather than as a question.

Constructed Response Questions

The final three items within the survey are presented as open-ended constructed response questions, and are grounded in the quantitative Likert-type items in the survey. The inclusion of open-ended constructed response questions will allow for deeper analysis of the overall results of the survey instrument, and provide greater insights (Johnson & Onwuegbuzie, 2004). The first of these three questions aims to gain a deeper understanding into how teachers could have better supported participants, and may allow for a deeper look at the concept of student support needs. The second of these items asks about what participants imagine to be teacher beliefs, which may provide insight into how participants perceive teacher cultural competence. The third and final question asks about the overall experience as a student, which would allow for an explicit look at the concept of student overall experience, and may also provide further insight into students' perceptions of teacher cultural competence, if that is relevant to their overall experience.

Platform

The survey is powered by the Google Forms online platform, and responses were stored in a password-protected Google Drive spreadsheet.

Organization

The survey is presented in an easy to read format, since the effectiveness of web-based surveys can depend as much on presentation as on the wording of questions themselves (Christian, Dillman, & Smyth, 2007). The survey opens with key

demographic questions:

1. Do you identify as Asian/Asian American? (This question requires an answer in the affirmative; a negative response submits the survey and closes out)
2. What is your cultural background? (This question is presented with an Open-Ended Dialogue Box with the following prompt: "Please consider including ethnicity, race, nationality, background, or heritage. You may include as many terms as are appropriate. You may also include religion, and any other cultural identification you choose")
3. What is the highest level of education you have attained? If you are currently pursuing a degree, you may indicate this. (This is presented as an open-ended question)
4. What sort of school did you attend for your K-12 education? Select one: Public, Private – Non-religious, Private – Religious, Charter, Other (This is presented as a multiple-choice demographic question, with an open-ended "other" option)

After the demographic questions, the participants were taken to the next page in order to begin the survey, which will open with a request that participants "please think carefully about responses," to reduce the threat of satisficing, and to improve response quality and reliability (Schutt, 2012). Participants were required to answer each item in order to progress in the survey. This will allow each unique participant's responses to be equally valuable in assessing the data.

Validity and Reliability

The validity and reliability of the initial draft of the survey were assessed through

a three-step approach, and a final check. The first two stages employed Moore and Benbasat's (1991) two-stage approach to sorting survey items, as outlined in Agarwal's (2011) study on construct validity in survey design. These two stages included two revisions of the survey items, which resulted in the second draft of the survey instrument (Appendix N). The third stage involved conducting a cognitive interview to further ensure validity (Collins, 2003; Martin, 2006) of this revised draft. Final revisions were made for clarity (Appendix O), and resulted in the final survey instrument (Appendix P). Finally, Cronbach's alpha was used to measure the internal consistency and reliability for the composite scales (Appendix M) developed for the study, as well as of the entire research instrument, and allowed for the removal any remaining survey items that did not fit (Tavakol & Dennick, 2011).

Verifying construct validity. Because it is particularly important to verify the construct validity of self-developed survey items (Agarwal, 2011), a rigorous pretesting process was used: the procedure was loosely based on Moore and Benbasat's (1991) two-stage sorting procedure, since using their procedure as a guide can improve questionnaires (Agarwal, 2011). This approach helped ensure internal consistency reliability and may be valuable in establishing construct validity. The first stage involved allowing judges to sort the survey items into constructs of their choice, in order to help identify ambiguously worded survey items (Agarwal, 2011; Moore & Benbasat, 1991). The process used in this study is based on Agarwal's (2011) prior use of this model.

Instrument development. To operationalize the constructs and develop an instrument for the two-stage sorting procedure, definitions and abbreviations were

developed (Appendix I provides the definitions and abbreviations for each construct), and were used in the next steps.

Unstructured sorting stage. In the first stage, two graduate students (henceforth referred to as judges) with in-depth knowledge of the subject matter of the study were asked to sort the 25 initial survey items into an unrestricted number of categories, and name these categories. As in Agarwal's (2011) study, each judge was given an envelope containing the initial survey items printed on individual strips of paper, in randomized order. Each judge was asked to sort the strips into piles, such that each pile included items seeming to measure a common construct. If they felt a particular item belonged to more than one category, they could place that item in a separate pile. After sorting the strips, judges labeled each category to define the construct the included items seemed to measure, in a form (Figure 1). Ultimately, the judges correctly placed close to 79% of the survey items into construct piles very similar to the rightful, existing constructs (Appendix J shows the detailed results of the unstructured sorting stage). Judges identified one category as very similar to another identified one category; thus, these two were combined before the next stage of sorting.

Your Name _____
Contact No. _____

Category Label	Definition / Explanation	Pile No. (staple each pile together and assign a number to it)	No. of items in pile

.
.

Figure 1. Form judges complete for unstructured sorting.

Structured sorting stage. In the second stage of sorting, three graduate students with experience in research design participated as judges. Here, the same approach as was used in stage one was used, except labels and definitions for each construct (see Table 17) were provided. As in Agarwal's (2011) procedure, the judges needed only to determine which category each survey item best conformed to. A category for "does not fit any category" was provided in case a judge thought a particular survey item did not fit any of the categories. The judges were given the 25 newly revised survey items, and asked to sort them into pre-determined categories. Because judges were provided the possible categories, this stage was administered as an online form with each category as a multiple-choice selection. Appendix K shows, in detail, the results of the structured sorting stage. After both rounds of sorting, final revisions were made to the survey (Appendix L shows these revisions), before a final version of the Likert scales was developed (Appendix M), and a new draft of the survey (Appendix N) was also

developed. A pretest and cognitive interview based on this revised draft was then administered; a discussion of this process follows.

Cognitive interview and pretest. Cognitive question testing for survey questionnaires should be a standard part of survey development, and is an important step in ensuring survey items are appropriate and serve their intended purpose (Collins, 2003). In order to evaluate the face validity of the survey items, participants who fit the profile of the intended study population, but who were not necessarily subject matter experts, were recruited to provide concurrent feedback on them. Three eligible participants were recruited for this process, since only a small number is needed for discovering major flaws or weaknesses in a questionnaire (Presser et al., 2004). If any items show significant change, the questions will need further revision.

Questions asked about each survey item. Participants read each individual survey item, and then provided feedback on four key required questions and one additional optional question:

1. What do you think this survey item is asking?
2. How would most participants interpret this survey item?
3. Would most participants be willing to answer this survey item?
4. Would most participants be able to answer this survey item?
5. Optional: How could this survey item be clearer?

These questions were based on recommended guidelines for cognitive testing: First, cognitive testing should ensure that respondents understand what is being asked in each survey item, and that different respondents understand each survey item in the same

way (Collins, 2003); thus, it is advisable to ask participants describe in their "own words" what a question means to them (Martin, 2006, p. 11). Next, because high quality questions are an important part of questionnaires (Fowler, 2009), if participants interpret a survey item in a manner that is very different from the intended meaning it will need revision to be clearer. Finally, it is also crucial to verify that respondents would be willing and able to answer each survey item (Collins, 2003). Any survey item that received negative feedback in response to any of the four questions from one or more of the participants was revised (Appendix N outlines these changes); the new revision of the draft will then be used to develop the final draft of the survey instrument (Appendix O shows the final version of the instrument).

Process for cognitive interview. The cognitive interview were conducted in a format modeled after a focus group, in which multiple participants were interviewed simultaneously, and responses to individual questions can be given on a volunteer basis. Using concurrent think-alouds can be valuable in cognitive interviews (Martin, 2006), and can "reveal the thought processes involved in interpreting a question and arriving at an answer" to help identify problems with questions (Presser at al., 2004, p. 112). In order to ensure that participants are able to provide the recommended real-time feedback on each survey item (Martin, 2006) the researcher will employ the following process:

1. The researcher introduced the study and provided participants with a modified version of the survey instrument with space to respond to the cognitive interview questions with each survey item. Participants were requested not to skip ahead.
2. After responses to the cognitive interview questions were recorded, participants

were able to record answers to the survey items.

3. Feedback from cognitive interview was used to further improve quality of revised survey draft. Items receiving negative feedback from any participants were adjusted in order to develop the final survey draft.

Cronbach's alpha. After the final version of the survey draft was developed, Cronbach's alpha was used as a final check to verify that the composite scales (Appendix M) developed for the study are appropriate (Tavakol & Dennick, 2011). It was determined that if the value for the scale were 0.7 or higher, the scale would have been kept the same; if the value were lower, individual items would have been removed, before final revisions were made for clarity and the survey draft was finalized.

Results and Development of Final Survey Instrument

During the unstructured sorting stage, the judges correctly placed 78.6% of the survey items into their rightful construct piles (Table J1). After the first round of sorting, a number of items from different constructs were revised due to ambiguity or because they did not fit well with the other items in the pile (Table J2 outlines these revisions).

During the structured sorting stage, all judges correctly placed 95.1% of the items into correct construct piles (Table K1). Any items placed in the "does not fit any category" pile were revised further to improve quality. After this second round of sorting the revised survey items, a few remaining items from different constructs were further revised (Table K2 outlines these revisions). The feedback from these stages resulted in the development of the revised survey draft, which was used in the cognitive interviews.

After the cognitive interview was completed, feedback from participants was used

to further improve the quality of the revised survey draft. Any item that received negative feedback from one or more participants was adjusted as needed (Appendix N shows, in detail, changes made following cognitive interview feedback). After all rounds of revisions were completed, a final draft of the survey instrument (Appendix P) was developed and finalized.

After the completion of the survey, analyses were completed to measure the internal consistency of the scales developed in the study (Appendix M shows these scales). Cronbach's alpha was also utilized, using the statistical program R, to examine the internal consistency of the entire instrument (Tavakol & Dennick, 2011). The value for the entire instrument is $\alpha = 0.8$, which is greater than 0.7, suggesting that the survey instrument has high internal consistency. Further, the values for Cronbach's alpha for each of the individual scales, measuring composite variables within the study, are also greater than 0.7, suggesting that they are valid.

Data Collection Procedures

A purposive sampling approach was used to recruit particular individuals who represented the desired population (Tongco, 2007). These individuals were South Asian or Indian American adults who are former students of the K-12 school system in the United States. Recruiting efforts focused on Indian American students in college, as well as potentially eligible individuals throughout the country. A discussion of the approach to collecting data, and rationales for components of the data collection procedures follows.

Purposive Sampling

Purposive sampling, which is a selective, non-probability approach to selecting

participants, was employed to select potentially eligible participants for this study. The inherent bias of purposive sampling to select eligible participants contributes to its effectiveness; the approach yields a participant pool of individuals who fit clear qualifications for what constitutes an appropriate informant for a particular cultural group, thus increasing the reliability of the findings (Tongco, 2007). The approach can also hold up to random probability sampling if the individuals represent their particular population (Tongco, 2007), as they would in the case of this study. Additionally, purposive methods can actually improve a study's internal validity, and data collected can be representative and "valid over the realm it represents," thus providing external validity (Tongco, 2007, p. 154). The method is particularly valuable when needing to collect data from individuals that might otherwise be difficult to isolate (Tongco, 2007); a discussion of desired participant population and challenges faced in recruiting follows.

Desired Participants

The ideal population to solicit for participation was current K-12 students from Indian American and South Asian American backgrounds; however, significant bureaucratic restrictions present challenges in accessing this population for two key reasons. First, isolating the Indian American students is nearly impossible, since local county demographic data does not classify students as Indian American, but rather, groups them with other Asian American students. In fact, part of the original problem driving this study is that Indian and Asian American students are lumped together both in the existing literature (Blair & Qian, 1998), as well as on the state level (Maryland State Department of Education, 2016) and the school district level (Howard County Public

School System, 2016; OpenDataMCPS, 2015; R. Low, personal communication, May 3, 2016). Second, working directly with current students is made extremely challenging due to bureaucratic restrictions (Montgomery County Public Schools, 2014a; Prince George's County Public Schools, 2015). However, next to current K-12 students from Indian American backgrounds, the best population was Indian and South Asian Americans adults who are former students in the K-12 public education system, and can reflect on their experiences.

Rationale for desired participants. It was necessary to seek participants who are former K-12 public school students, and self-identified as South Asian or Indian American. This population may even have been able to offer a better perspective than current students due to their relative maturity. Rather than limiting the sample pool to an arbitrary age range of eligible participants, any participants who self-identify as Indian or South Asian American and former students in the K-12 school system were deemed eligible for the study. This allowed the researcher to circumvent challenges and resistance associated with working with current K-12 students directly, and simultaneously allowed for a larger pool of potential participants.

Concerns about retrospective responses. While there may be some risk to reliability in asking participants to reflect on past experiences, such risks are typically greater in studies that require precision in estimating event frequencies and event dates (Henry, Moffitt, Caspi, Langley, & Silva, 1994). Further, while survey participants may sometimes have difficulty reporting information after time has passed, good question design can improve the reliability of survey responses (Porter, 2011). In this study,

participants were prompted to reflect on their K-12 experiences before answering questions, both in the digital consent form (Appendix Q), as well as at the beginning of the survey; thus, retrospective reports in response to the survey items should suffice.

Recruiting Participants

In order to maximize the sample size, eligible participants were recruited using a variety of approaches. Connecting with Indian and South Asian American student associations on college campuses allowed the researcher to connect with young adults from the desired population. Specifically, participants were recruited through connecting with the Indian Students Association (ISA) at the University of Maryland, University of Maryland Baltimore County, and Towson University, as well as with the Hindu Students Association (HSA) and Sikh Students Association (SSA) at all of these schools, given that their membership is typically Indian and South Asian American students. Given that personalization significantly increases response rate in web surveys (Heerwegh & Loosveldt, 2006), the researcher personally contacted the heads of each of these organization with a recruitment letter (Appendix R) to request that they share a secure link to the survey item with members of their organization. Further, because people tend to respond more favorably to solicitations in computer-mediated communications when the person contacting them is identified as having a higher status, such as a scientist or researcher (Guéguen & Jacob, 2004), the recruitment letter clearly identified the researcher as being affiliated with Johns Hopkins University.

The researcher complemented this approach to recruiting with purposive sampling conducted through direct online recruiting by sharing a recruitment letter (Appendix S)

directly with potential eligible participants. The first round of surveying yielded a moderate sample size of willing participants (n = 17), of which most participants' responses were actually eligible and usable for the survey results (n = 15) through online chain referral snowball sampling methods alone; thus, a combination of both approaches is ideal. Thus, in addition to recruiting eligible college students, links to information about the study, and relevant information was shared through the researcher's own website, Facebook and LinkedIn networks, public Twitter account, and professional and personal networks.

Rationale for targeting college students. Because Asian American students have a high graduation rate (data on the graduation rates of Indian American students specifically is unavailable) at nearly 90 percent (National Center for Education Statistics, 2015b), there is only slight concern that choosing to work with South Asian American adults who are recent K-12 graduates would not be a fair reflection of South Asian Americans in the K-12 system. Finding large populations of Indian American adults who attended public K-12 schools would have been a challenge, but was made more feasible by connecting with Indian American student groups at colleges and universities. There was concern that recruiting from an exclusively college-attending population, and further, recruiting from members of Indian organizations within that population would be a study limitation. However, Asian American students (data on the college attendance rates of Indian American students specifically is unavailable) have the highest rate of college attendance as compared with other races and ethnicities (National Center for Education Statistics, 2015a), which should help in tempering this limitation slightly. Further, the

researcher was able to improve the generalizability by also recruiting participants through other online recruiting methods not limited to college sites.

Rationale for online recruiting. To maximize the credibility of the study, it was particularly important to maximize response rates (Fowler, 2009). Thus, in addition to recruiting college students, purposive sampling by recruiting eligible participants online was an important component in getting a bigger sample size. As with online snowball sampling, the approach of recruiting eligible participants online by advertising the study on pages and through social media outlets was helpful in increasing the pool of eligible participants and the geographic scope of a study (Balter & Brunet, 2012), thus increasing the generalizability of findings. Given that online participant recruitment often requires minimal time and resources (Baltar & Brunet, 2012), which are both limited, this was an ideal supplementary approach to recruiting participants.

Summary

The experiences of Indian American and South Asian American students are examined through an exploratory study, consisting of survey items comprising Likert-type scales, and three open-ended constructed-response questions, that seek to answer the exploratory research questions. Such a study format may allow for an exploration of Indian American and South Asian Americans' K-12 experiences, as related to their teachers' low cultural competence through an examination of four key research questions: (1) Do South Asian Americans feel their general academic support needs are met? (2) Do South Asian Americans feel their executive functioning academic support needs are met?; (3) Do South Asian Americans perceive their K-12 teachers as culturally

competent?; (4) How connected do South Asian American students feel to school? The survey's reliability and validity are carefully examined through a multi-stage process before the survey is administered to the recruited participant sample. The results of the study should allow for the research questions to be explored, and may lay the foundation for further research.

Possible Policy or Pedagogical Changes

Developing professional development interventions may be one of the key projected uses for the findings, as long-term, an intervention to improve teachers' cultural competence would improve their support of South Asian American students. The results of the study may be used practically to inform the development of possible interventions. Additionally, the results may be valuable in building the case for supporting and funding professional development, teacher training, in-depth multicultural education programs, or even eventual policy changes related to multicultural education for teachers.

Research-Practitioner Collaborations Needed to Apply Research

Findings of this research must be readily accessible to education researchers, professional development instructors, multicultural education specialists and curriculum writers, administrators, and teachers themselves, to have access to these findings, in order to affect change within both the literature, and educational organizations.

CHAPTER FOUR

ANALYSIS OF DATA

In an effort to address the research questions and understand Indian American and South Asian American students' experiences in their K-12 schooling, this study sought to examine their desired general academic support needs, desired executive functioning support needs, and their perceptions of their experiences as students, including their connectedness to the school, and their perception of their teachers' cultural competence. This chapter presents the results from statistical analyses on data collected using survey methods described in Chapter Three, as well as relevant language from constructed responses that help address the research questions.

This chapter includes three key components. First, a description of the data collected from the participant sample and descriptive statistics for each variable are reported. Data analyses for these reported statistics are provided in this discussion. Next, included within this discussion is language from the constructed response questions that further illustrates the findings. Finally, additional findings are provided, including correlations between the variables through the use of a correlation matrix, and a brief discussion of the merits of combining some of the scales to improve their validity.

Sample

As described in Chapter Three, participants targeted were primarily college-aged, Indian American and South Asian American adults. These participants, many of whom were recruited through their connection to the various organizations described in Chapter

Three, were recruited contacted through their organizations, either via a message from the leader of the organization, a direct recruitment letter, or through the organization's social media pages (Appendix U provides a list of specific pages contacted). Additionally links to the study were shared through the researcher's social media and public accounts.

Of the 131 potential participants who accessed the survey, 16 individuals did not self-identify as Asian American, and were therefore unable to complete it. Of the 116 survey participants, 31 participants self-identified as Asian American but not as Indian American or South Asian American. Only 85 survey participants (74% of total participants) self-identified as being of South Asian American descent or cultural background and therefore fit the inclusion criteria for the survey, resulting in a final relevant sample of $n = 85$. Based on participants' self-identified characteristics, the totals for participant characteristics may not total 85. Table 7 provides further detail about the participants.

Table 7

Descriptive Statistics for Participant Demographics

Participant Characteristic[a]	Participants	Percentage
Regional/Cultural Background		
Indian American*	75	88.2%
Region of India not specified	47	55.3%
North India	17	20.0%
South India	6	7.1%
Western India	3	3.5%
Eastern India	< 3	2.4%
South Asian (non-Indian)	10	11.8%
Region not specified	3	3.5%
Pakistani American	5	5.9%
Religious Affiliation		
Omitted religious affiliation	30	35.3%
Hindu	16	18.8%
Sikh	10	11.8%
Christian	< 3	2.4%
Highest Education Level**		
Doctorate Degree		10.6%
Doctorate in Progress		9.4%
Masters Degree		28.2%
Masters in Progress		4.7%
Bachelors Degree		27.0%
Bachelors in Progress		14.1%
High School/No College		<4.0%

Notes. [a]Based on individual responses, responses may not total 85.
*North Indian participants identified as Punjabi; South Indian participants identified as South Indian, Tamil, Orissa, or other South Indian region; Eastern Indian participants identified as Eastern Indian or Bengali; Western Indian participants identified as Gujarati.
** Education level is reported only as percentages due to small sample size (n = 85).

The participant sample is comprised of South Asian Americans from various backgrounds, which is reflected in descriptors such as Indian, Sikh and Indian, Hindu American, Pakistani American, and South Asian, among others. Further, the participants are educated individuals; over half (52.9%) of participants have earned, or are in the process of pursuing, a graduate degree beyond a Bachelor's degree, and almost the entire remaining population had earned, or was in the process of earning, a Bachelor's degree.

Findings

Descriptive statistics for the relevant variables in the study are reported in Table 8. The scales comprise Likert-type composite scores through subscales, as outlined in Chapter Three (Appendix M shows each of the survey items that comprise a composite score). Participants responded to each item from "Strongly Disagree" to "Strongly Agree;" these responses were recoded from 1 to 4 where 1 represents "Strongly Disagree" and 4 represents "Strongly Agree." The means listed in the table represent means of total scores for each component of that index.

The desired general academic support total represents the sum score of three survey items (Table M1 shows the three survey items used to provide a composite measure of students' desired general academic support needs), while the received general academic support total represents the sum score of two survey items (Table M2 shows the three survey items used in the composite score). The desired executive functioning support total represents the sum score of six survey items (Table M3 shows the survey items used in the composite measure), and the received executive functioning support total represents the sum score of five survey items (Table M4 shows the three survey

items used in the composite measure). Next, the students' perception of teachers' low cultural competence total represents the sum score of six components (Table M5 identifies the survey items used in this composite score). Finally, the students' perceptions of their experiences total represent the sum score of two components (Table M6 identifies the survey items used in this composite score).

Additionally, the minimum, maximum, mean, and standard deviation of each of these totals reflect the sum score of the relevant scales. While it may be imperfect to treat Likert data as interval, it is common practice to examine the output of Likert-type questions as interval-level measurements for the purposes of considering mean, standard deviation, and various statistical analysis approaches (Jamieson, 2004). Higher scores for each construct in this case represent beliefs in agreement with that construct (for example: higher desire for general academic support). Lower scores for each construct indicates a lower degree of agreement with the particular construct (for example: a lower desire for general academic support). For the perception questions, a higher score suggests more agreement with the idea that teacher lacked cultural competence; a lower score indicates less agreement with the idea.

Where relevant, specific quotes from the constructed responses are included to provide further insights into responses to the quantitative survey items. These responses were examined using the software NVIVO, in order to identify emerging patterns; in many cases, trends emerged which provide further insight into perspectives and experiences of participants, as well as into understanding results to related survey items.

Table 8

Descriptive Statistics for Perceptions of South Asian Americans

Variables	Mean*	Min	Max	Raw Mean	Standard Deviation
Desired General Academic Support	3.1	3.0	12.0	9.1	2.0
Received General Academic Support	2.6	2.0	8.0	5.2	1.3
Desired Executive Functioning Support	3.0	6.0	24.0	17.7	3.9
Received Executive Functioning Support	2.5	5.0	20.0	12.5	3.0
Perceptions of Teachers' Low Cultural Competence	2.9	6.0	24.0	17.1	4.3
Lack of Connectedness to School	2.6	2.0	8.0	5.3	1.7

Note. n = 85.
*Mean has been converted to correspond to the 1-4 rating scale.

The average scores for Desired General Academic Support is $\mu = 3.1$, while the average score for Received General Academic Support is $\mu = 5.2$. Desired Executive Functioning Support has an average score of $\mu = 3.0$, while Received Executive Functioning Support has a mean of $\mu = 2.5$. Students' perception of their teachers' cultural competence, where a higher number indicates a higher degree of agreement with the idea that teachers lack cultural competence, has a mean score of $\mu = 2.9$. Finally, students' connectedness to school, where a lower number indicates lower connectedness to their school, has a mean of $\mu = 2.6$.

In order to answer and further explore the research questions, outcomes of the

individual survey items, which comprise the composite scores, are also necessary to examine. This section includes statistical analyses used to answer each of the research questions using means, standard deviations, and ranges for each of the composite scales, as well as the individual survey items that comprise them. Additionally, Cronbach's alpha is determined for each of the scales, using the statistical computer program R, to determine their internal consistency, which describes how closely related the items in the scale are; as such, it is a measure of the scales' reliability. A deeper discussion of each of these constructs and their components follows.

General Academic Needs

The first research question, "Do South Asian Americans feel their general academic support needs are met?" was examined in this study. The composite scale for Desired General Academic Support consists of three survey items with high inter-item correlation, as measured by Cronbach's alpha ($\alpha = 0.74$). The mean score for Desired General Academic Support was $\mu = 3.1$. Meanwhile, the mean score for Received General Academic Support, which was comprised of two survey items ($\alpha = 0.71$) was $\mu = 2.6$. This suggests that South Asian Americans are not necessarily feeling that their general academic support needs are being met. This is echoed in one of the individual survey items that contribute to this scale, which asks explicitly whether respondents might have benefitted from more help (64.7% expressed agreement). Additionally, in a constructed response question, most (70.6%) participants indicated that their teachers could have better supported them or their academic needs. A deeper discussion of individual survey responses that address this research question follows; language from

the constructed response question is included where relevant to provide further detail.

Individual help. A majority (74.1%) of Indian American and South Asian American individuals who participated in the study expressed that when they were K-12 students, they would have benefitted from individual help from teachers, to make sure they understood content being taught before instruction continued. Additionally, over a quarter (29.4%) of participants expressed that they "strongly" agreed with this statement. However, less than half (48.2%) of the participants said that teachers actually provided them with this support and stopped to offer them individual help before continuing with instruction (51.8% indicated teachers did not provide this support). In response to the related constructed response item, one participant indicated they "would have preferred more specialized attention," while another stated they "would have appreciated more support" and "personal attention" from teachers.

Review opportunities. A majority (82.4%) of participants indicated that when preparing for a quiz or test, they would have wanted teachers to support their learning by offering additional opportunities to review what was learned. Additionally, 36.5% of participants "strongly" agreed with this statement. Meanwhile, some participants (35.3%) indicated feeling they did not receive this support (however, 64.7% felt that they did). In response to the related constructed response item, one participant indicated they "wish there were more opportunity to ask teachers questions," while another wished more time were spent "going through problems, assignments, or examples."

General academic support. A majority (64.7%) of participants indicated agreement with the following statement: "Generally speaking, I could have benefitted

from more general academic support than I received from my K-12 teachers." More participants indicated that they "strongly" agreed (36.5%) with this statement than that they simply agreed (28.2%). In response to the related constructed response item, one participant indicated that it would have been helpful if teachers had spent "more time… explaining difficult to grasp concepts." Another participant expressed that teachers could have better supported their needs "by not assuming I understood everything."

Executive Functioning Support Needs

The second research question, "Do South Asian Americans feel their executive functioning academic support needs are met?" was explored in this study through the survey questions. The composite scale for Desired Executive Functioning Support consists of six survey items with high inter-item correlation, as measured by Cronbach's alpha ($\alpha = 0.87$). The mean score for Desired Executive Functioning Support $\mu = 3$. The mean score for Received Executive Functioning Support, an index of five survey items ($\alpha = 0.9$) was $\mu = 2.5$. This would indicate that respondents generally did not feel that their executive functioning needs were met, which is further supported by individual survey item responses. Most notably, a majority (70.6%) of participants indicated, through an open-ended constructed response question, that their teachers could have better supported them, or their academic needs. A deeper discussion of individual survey responses, which address this research question, follows; language from the constructed response question is included in these discussions where relevant to provide greater detail.

Chunking. A majority (67.1%) of participants indicated when working on in-class assignments, they would have found it beneficial if their teachers had supported

their ability to process information by giving them instructions in chunks. However, a majority (57.7%) of the participants also indicated that they did not receive this support (42.4% indicated that they received this support).

Check-ins. A majority (68.2%) of participants indicated that they would have found it helpful if, when working on in-class assignments, teachers had supported them in managing time by periodically checking on their progress to help them stay on track. However, almost half of participants (45.9%) indicated that they did not receive this support (54.1% indicated that they did receive it).

Writing down assignments. A large majority (74.1%) of participants indicated that they would have found it helpful if their teachers had supported them in developing their time management skills, by reminding them to write down assignments and/or due dates. Only a quarter (25.9%) of participants indicated that this would not have been helpful to them. However, almost half (48.2%) of participants indicated that they did not receive this support (51.8% indicated that they did).

Time management. A large majority (80.0%) of participants indicated that they would have found it helpful if their teachers had supported them in building my time management skills. Further, 35.3% indicated that they "strongly" agreed with this statement. However, only 40.0% of participants indicated that their teachers actually helped them develop this skill; 60.0% indicated that they did not. Additionally, in response to the related constructed response item, 3.5% of participants explicitly identified developing time management skills as something they wish teachers had supported them with in their schooling.

Organizational skills. A slight majority (56.5%) of participants would have found it helpful if teachers had provided them with strategies for keeping their work organized. Almost a quarter (24.7%) of participants "strongly" agreed with this statement. However, fewer than half (48.2%) felt their teachers actually provided this support. Additionally, 7.0% of participants explicitly volunteered that it would have been helpful if teachers had supported them in developing their organizational skills in response to the related constructed response item.

General executive functioning skills support. A majority (69.4%) of participants agreed with the statement: "Generally speaking, I could have benefitted from more support in building my time management and organizational skills than I received from some of my teachers." In response to the related constructed response item, many participants expressed that teachers could have better supported them by providing them with help developing "study skills" for "how to learn."

Perception of Teachers' Low Cultural Competence

The third research question, "Do South Asian Americans perceive their K-12 teachers as culturally competent?" The composite scale for Perceptions of Teachers' Low Cultural Competence consists of six survey items with high inter-item correlation, as measured by Cronbach's alpha ($\alpha = 0.88$). The mean score for Perceptions of Teachers' Low Cultural Competence, where a higher number indicates a higher degree of agreement with the idea that teachers lack cultural competence, is $\mu = 2.9$. Additionally, a majority (72.9%) of participants expressed disagreement, as indicated through their constructed responses, with the question "do you think your teachers understood you,

your cultural identity, and your background."

A majority (63.5%) of participants felt that their teachers made assumptions about them based on their cultural background. Constructed responses include language suggesting teachers make "incorrect assumptions" about their students (one participant indicated their teachers made assumptions "about what being Indian…meant in terms of my personal and political views"). Additionally, a large majority (81.2%) felt that compared with students from other cultures, teachers seemed to know little about their cultural heritage. This is consistent with the responses to the constructed response items, in which there are 95 distinct references to teachers lack of cultural competence or literacy in understanding Indian or South Asian American cultures (one participant stated that they did not feel that teachers understood "certain aspects" of their culture; another stated their teachers knew so little about their culture that they "were unaware of where India was on the map").

Further, over half (51.8%) of the students felt their teachers tended to lump them in with other Asian American subgroups. This is echoed in the responses to constructed response items, which include 15 distinct references to teachers' perception of all Indian or South Asian American students as the same (one participant stated that "teachers saw me as representative of all non-white" students; another felt "categorized into the general category of 'Asian'").

Over three-quarters (77.7%) of participants also felt their teachers assumed they were smarter than students from other cultural or racial groups. A majority (68.2%) of participants felt that their teachers seemed to believe they needed less help than their

peers from other cultural or racial groups. Similarly, a majority (64.7%) of participants felt their teachers seemed to believe they needed less help developing their time management and organizational skills than their peers from other cultural or racial groups. This is reflected in responses to constructed response items, which include 19 distinct references to teachers seeming to hold Indian American and South Asian American students to a higher standard, or believing the model minority myth. Participants indicated teachers "assumed" they were intelligent, or needed less help than others. These findings reflect the findings of the exploratory study, in which teachers indicated holding these beliefs about their Indian American students.

Participant responses also suggest teachers' low cultural competence may not restricted to schools or areas with a particular demographic breakdown. Students who attended schools with predominantly White students, minority-majority schools, and schools with high populations of South Asian Americans all shared experiences of teachers with low cultural competence. Additionally, there may be a tendency for teachers to expect students from South Asian American backgrounds to speak on behalf of their cultural backgrounds, without regard for their preferences or connectedness to their background (12.9% of participants described having had such an experience).

Students' Connectedness and Overall Experiences

The fourth and final research question, "How connected to school do South Asian Americans feel?" Students' connectedness to school and their overall experiences were examined through the composite scale for students' "connectedness," and an open-ended constructed response question about their experience. A deeper discussion of individual

survey responses, which address this research question, follows.

Connectedness to school. The composite scale for Connectedness to School is comprised of two survey items ($\alpha = 0.7$). This composite scale originally consisted of three survey items (See Appendix O for changes), but after data collection was completed, there was evidence in the collected data that one of the items may have been ambiguous, suggesting the question may have been misinterpreted.[4] The mean score for the Connectedness index is $\mu = 2.6$. A slight majority (58.8%) of participants felt peers from other cultural groups were more "connected" to the school than they were. Further, over a quarter (29.4%) of participants "strongly" felt this way. In response to the constructed response items, many participants indicated not feeling particularly connected to teachers (one participant felt "very disconnected socially from my teachers"), or their schools (one participant felt targeted by "racist bullying" and felt "left out or unconnected"). The constructed responses also include five distinct references to feeling "alienated," feeling a "disconnect," or feeling "disconnected."

Additionally, nearly half (47.1%) indicated their teachers did not seem to understand them as people. Through an open-ended, constructed response question, a large majority (72.9%) of participants did not feel their teachers understood them, their cultural identity, and their backgrounds. Only a small minority (14.1%) of participants indicated feeling their teachers understood them, their cultural identity, and background.

Students' overall experience. In response to an open-ended constructed response

[4] Cronbach's alpha for the scale is significantly improved by omission of the item in question from the dataset ($\alpha = 0.62$ compared to $\alpha = 0.72$ when omitting it); it has been removed.

question about "overall experience" of participants, in context of their relationship with teachers, more than half (61.2%) of participants indicated that their experience was overall positive. Many of these participants identified strong relationships with teachers as a component of their relationship; one participant indicated that they “had a very good relationship with teachers who treated me equally to other students.” However, there were attempts to qualify responses (participants used phrases such as “good, for the most part”); one participant, who reported a mostly good experience, referenced an experience with a teacher who “seemed to think my ethnicity made me an expert on India.”

The remainder of participants did not identify as having had an overall positive experience with schooling. Over a quarter of respondents (27.1%) indicated their experiences were somewhere in the middle (these respondents described their experience using language such as “average,” “fair,” or “not very memorable”). Language from responses also suggests participants struggled with teachers’ high expectations for students with their cultural background (one participant indicated teachers “assumed I was smart,” while another felt “teachers expected more” from them). Still others stated they had some good experiences, but “never connected” with teachers.

The remaining minority (11.8%) of respondents indicated their overall experience as a student, in context of their relationships with teachers, was negative. Responses ranged from somewhat negative (one participant described their overall experience as “meh”) to extremely negative (one participant described their overall experience as “very negative,” and another described it as “painful”).

Additional Findings

In addition to the findings relevant to the research questions, two additional key findings emerged from the results. First, there exist correlational relationships between variables. These relationships may provide deeper insights into understanding how the variables examined in this study may be related to one another, and may suggest that relationships exist between them. Second, there is evidence that there may be value in combining some of the composite scales, which has implications for future research.

Correlations

There are a number of potential correlations that exist between variables examined both in the closed-ended and open-ended components of the survey. A discussion of statistical analyses used to examine possible correlational relationships between the variables follows. Table 9 below is a correlation matrix for the variables.

Table 9

Pearson Correlation Matrix for Variables

Variables	1	2	3	4	5	6
1. Desired General Academic Support	1.0					
2. Received General Academic Support	0.02	1.0				
3. Desired Executive Functioning Support	0.37***	0.08	1.0			
4. Received Executive Functioning Support	0.15	0.68****	0.25*	1.0		
5. Perceptions of Teachers' Low Cultural Competence	-0.01	-0.04	0.06	-0.10	1.0	
6. Lack of Connectedness to School	0.18	-0.20†	0.26*	-0.22*	0.61****	1.0

**** Correlation is extremely significant at $p < 0.00001$.
*** Correlation is extremely significant at $p < 0.001$.
** Correlation is very significant at $p < 0.01$.
* Correlation is significant only at $p < 0.05$.

There is a wide range of correlations between variables, with correlation coefficients ranging from -0.20 to 0.61. A statistically significant correlation exists between desired general academic support and desired executive functioning support at the .0001 level. A statistically significant correlation also exists between received general academic support and received executive functioning support, at the .00001 level. A statistically significant relationship exists between desired and received executive functioning support, at the .05 level. Statistically significant relationships also exist at the .05 level for lack of connectedness to school and two other variables: desired executive functioning support and received executive functioning support. An extremely significant relationship exists at the .00001 level between lack of connectedness to school and perception of teachers' low cultural competence.

While the three constructed response questions were meant to provide deeper insights into the experiences and perceptions of participants, it was possible to categorize responses and code them numerically to examine possible correlations. Responses to the first constructed response question, which examined students' perceptions of teachers' potential for greater support, were recoded: 0 represents feeling teachers could have provided more support; 1 represents a neutral response; 2 represents feeling teachers could not have provided more support. Responses to the second question, which examined whether students felt that their teachers understood them and their cultural backgrounds, were recoded: 0 represents not feeling understood by teachers; 1 represents neutral responses; 2 represents those who felt understood. Finally, the third open-ended question examines the overall experiences of students in the context of their relationships with teachers. Responses were recoded: 0 represents an overall negative experience in

school; 1 represents a neutral experience; 2 represents an overall positive experience. Table 10 below provides a correlation matrix for the three concepts examined in the constructed responses.

Table 10

Pearson Correlation Matrix for Constructed Responses

Variables	1	2	3
1. Potential for Greater Teacher Support	1.0		
2. Teacher's Understanding of Student	-0.1	1.0	
3. Overall Experience in Context of Relationship with Teachers	0.0	0.2*	1.0

* Correlation is significant at $p < 0.10$

Combined Scale for Desired Support

Students' Desired General Academic Support and Desired Executive Skills Support are significantly correlated ($r = 0.4$; $p < .001$). Combining the scales yields a high value for Cronbach's alpha ($\alpha = 0.9$, compared to $\alpha = 0.7$ for Desired General Academic Support and $\alpha = 0.9$ for Desired Executive Functioning Support). A higher value reflects a greater desire for support. The combined scale mean is $\mu = 3$.[5]

Combined Scale for Received Support

Students' Received General Academic Support and Received Executive

[5] This value may also be reported as $\mu = 26.8$ ($SD = 5.1$; range of 13 to 36).

Functioning Skills Support are significantly correlated ($r = 0.7$; $p < .001$). Combining into a single scale for Received Support yields a high value for Cronbach's alpha ($\alpha = 0.9$, compared to $\alpha = 0.7$ for Received General Academic Support, and $\alpha = 0.9$ for Received Executive Functioning Support). A higher value reflects having received a higher amount of support. The mean for the combined scale is $\mu = 2.5$.[6]

Combined Scale for Negative Experiences

Students' connectedness to teachers and their schools are closely related to perceptions of teacher's cultural competence. Combining the scales of Perceptions of Teachers' Low Cultural Competence and Lack of Connectedness to School into a single scale representing students' Negative Experiences yields a higher value for Cronbach's alpha ($\alpha = 0.9$, compared to $\alpha = 0.7$ for Perceptions of Teachers' Low Cultural Competence and $\alpha = 0.9$ for Lack of Connectedness to School). A higher score value reflects students' perception of their schooling experience as more negative. The mean score for the combined scale is $\mu = 2.8$.[7]

Limitations

The survey instrument has certain specific limitations, resulting from the method of recruiting, the modality of the instrument, certain characteristics of the sample, the sample size, and the exclusion of survey items. This study also has some limitations as a result of the sampling method used. In order to access a specific participant population

[6] This value may also be reported as $\mu = 17.7$ ($SD = 4.0$; range of 7 to 28).

[7] This value may also be reported as $\mu = 22.4$ ($SD = 5.5$; range of 8 to 32).

from a particular cultural group, this study uses purposive sampling; while this approach is highly common and acceptable, random or probability sampling is arguably ideal (Shadish, Cook, & Campbell, 2002; Tongo, 2007). This approach may raise some concern about generalizability to the entire South Asian American population.

Natural limitations for accessing the population of South Asian Americans do exist, particularly given that existing data tends not to disaggregate types of Asian Americans; the inherent difficulty in identifying and recruiting members of this population from an existing pool of possible participants contributes to the need for online recruiting. However, due to the nature of the participant recruitment process, as well as the instrument modality and online platform, there may be limitations in the generalizability of the survey results to the larger South Asian American population (Dillman, 1991). The limited availability of existing data on South Asian Americans and the lack of data disaggregation or existing databases that isolate eligible participants resulted in the need to recruit participants through nontraditional methods.

While participants were not asked to report jobs or income levels, it can be deduced from the nature of the recruitment approach, and the online platform of the survey instrument, that those who were able and willing to participate are likely individuals who might be classified as middle to upper-middle socioeconomic class. However, this may not impact generalizability too greatly, since many South Asian Americans, and Indians in particular, tend to be high earners (Rahman & Paik, 2017).

Because a majority (88.2%) of participants in this study identify as Indian American, it is advisable that future studies include a broader sample of South Asian Americans, as Indian Americans only comprise a portion of this diverse group. However,

it should also be noted that while the population of South Asian Americans as a whole continues to increase, Indian Americans comprise over 80% of the South Asian American population (Rahman & Paik, 2017). As such, the high proportion of Indian American participants in this study may not be a limitation. However, overrepresentation of specific Indian regions may present a possible limitation in terms of generalizability.

More than half (55.3%) of Indian American participants did not specify what region of India they originated from, but of those who did, North Indians (Punjabis specifically) were overrepresented (North Indians comprise 20% of the Indian Americans; South Indians comprise 7.1%; Western Indians comprise 3.5%; Eastern Indians comprise 2.4%). Additionally, the sample includes highly educated participants; almost half (48.2%) of the participants have a Masters degree or higher. While this is consistent with the tendency to be highly educated in the South Asian American population (Rahman & Paik, 2017), it does not reflect the entire population of Indian American or South Asian American adults who could have been participants. Future work should aim to include a broader spectrum of South Asian Americans, from more diverse South Asian backgrounds, and from varying levels of education, to more deeply understand their experiences.

Future work should also examine a larger sample size. While the sample obtained (n = 85) was sufficient for statistical analysis, and the qualitative responses provide some opportunity for deeper insight, a larger sample would yield more generalizable results, representative of a greater population. Given that in public schools in the United States there may be over 570,000 Indian American students alone, and an even greater number of South Asian Americans in total, an ideal sample size would include a sample of at

least n = 384, assuming a confidence level of 95%, and a confidence interval of 5, in order to speak to the larger population (O'Leary, 2014).

Omitted Survey Item

The composite scale for Connectedness to School, which was originally comprised of three items, was changed to exclude one survey item from the final data analysis (see Appendix O for changes), due to concerns that it was ambiguous. A factor analysis revealed the reliability of the scale for Connectedness to School would be improved by omission of this survey item.[8]

Summary

Each of the four research questions were examined using statistical analyses and through an examination of language in the constructed response items, and evidence suggests (1) South Asian Americans may want more General Academic Support than they receive, (2) South Asian Americans may want more Executive Functioning Support than they receive, (3) South Asian Americans may perceive teachers as having Low Cultural Competence, and (4) South Asian Americans have varying levels of connectedness to school, and diverse overall experiences in school. Additional insights arising from correlations between variables reveal statistically significant relationships that may be valuable in future research: Desired General Academic Support and Desired Executive Functioning Support may be combined into one variable measuring Desired

[8] Cronbach's alpha for the Connectedness to School scale is improved by omitting this survey item (the value is $\alpha = 0.72$ without it, compared with $\alpha = 0.62$ if the item is kept in the scale).

Support; Received General Academic Support and Received Executive Functioning Support may be combined into one variable measuring Received Support; Perceptions of Teachers' Low Cultural Competence and Lack of Connectedness to School may also be combined into a single scale measuring Negative Experiences. A deeper discussion of these findings and their implications for practice and research follows in Chapter Five.

CHAPTER FIVE

DISCUSSION

Introduction

This chapter offers a discussion of implications for the findings of this study, in the context of the research questions, and in the general, broader context of better understanding the schooling experiences of Indian American and South Asian Americans. Through a discussion of quantitative and qualitative findings related to the participants' desired general academic support needs, desired executive functioning support needs, and their perceptions of their experiences as students, including their connectedness to the school, and their perception of their teachers' cultural competence, this chapter examines possible implications. Finally, recommendations for practice, as well as recommendations for further research, are discussed.

Implications

A discussion of the study's results is presented in this section in order to fully answer the four research questions this study sought to examine, and in order to explore their implications.

Research Question 1: Do South Asian Americans feel their general academic support needs are met?

It seems participants may not feel all of their general academic support needs were met. While the average score for the composite scale for Desired General Academic Support was $\mu = 3.0$, suggesting the participants do value general academic support, the

average score for Received General Academic Support was $\mu = 2.6$, indicating they may not all be receiving support to the degree that they want it. Further, an examination of one of the individual survey items comprising this scale reveals that a majority (64.7%) of participants explicitly reported wanting more general academic support from teachers than they received.

It is also possible that for those individuals who do feel supported enough, it is not an indication that teachers themselves are providing sufficient support, but that those students have some other factor that leads them to need less support than their peers. Of three participants who did feel they received enough support, language from the constructed responses suggests that there may be other factors that prevented them from needing greater support from teachers; one of these participants, for instance, shared that teachers did do "a lot for my academic needs, but that should be qualified by admitting that I was a fairly self-sufficient student," while another shared, "I was very self-reliant and if I needed help, I proactively reached out." Given that the average students may not self-identify as "very self-reliant," or even "fairly self-sufficient," this may not be the experience of most students. The third of these participants shared, "for the most part, my teachers were as helpful as they could've been. I, however, maintained good grades in high-level classes without the need for much help." For a student who managed to keep up high grades in difficult courses without needing help, examining the supportiveness of teachers may be irrelevant. These findings suggest that possibly, when participants do report feeling sufficiently supported, it is in spite of, and not because of, their teachers. The teachers themselves may not necessarily be particularly supportive, but the students might be self-sufficient, self-reliant, or able to maintain high grades without help.

Individual support. A majority (74.1%) of participants felt they would have benefitted from more individual help from teachers to ensure they understood what was being taught. This is reflected in language from constructed response items, in which participants reported wishing teachers had given them more individualized support. One participant reported "it would have been helpful to get one on one attention" from teachers. Another participant, who struggled through senior year, shared "more check-ins and support from teachers could have helped that year." Some participants described specific help they wished they had received (one participant reported they would have benefitted from more help with writing skills in particular). Another participant, who indicated that they struggled with math, shared that they "would have appreciated more support: tutoring, more personal attention, and even encouragement." At the very least, it may be beneficial for teachers to be more aware of their students' level of understanding (one participant indicated that teachers could have better supported their learning simply "by not assuming I understood everything," while another participant described being "able to fly under the radar" because their teachers mistakenly "assumed I was smart"), and avoid comparing them to others (one participant struggled with "explicit and implicit comparisons between my performance and that of other Indian classmates").

Time spent teaching concepts and review opportunities. Participants also indicated that teachers could have better supported them by spending more time teaching complex concepts, and by offering more opportunities for review (other participants merely wanted "more opportunity to ask teachers questions outside of the classroom"). One participant reported wishing teachers had generally spent more time "talking about the bigger picture, really taking the time to explain concepts"). Another participant

wished teachers had spent more time on complex problems and assignments, and provided more "examples that simulate real-world" experiences in order to better support their learning. Another reported that they "wish more time was spent explaining difficult to grasp concepts." In fact, most (82.3%) participants expressed they would have wanted teachers to support their learning by offering more review opportunities. However, less than half (48.2%) of participants felt their teachers supported their learning by providing them individual help to ensure they understood content before instruction continued, and only slightly over half (64.7%) of participants felt teachers supported their learning by offering additional opportunities to review what was learned.

Appropriate challenges. On the other hand, some participants felt teachers did not offer them support in the form of greater challenges when appropriate (one participant reported "I wasn't challenged enough," while another indicated they would have appreciated being given "tough (but not impossible) assignments that reflect the difficulty of the exams"). Supporting students' general academic skills and includes providing them with appropriately challenging work; thus, teachers may better meet students' needs if they seek out ways to support their need for a greater challenge. Additionally, not challenging students enough may prevent them from developing valuable study skills. One participant reported that they had no study skills "until high school because I didn't need them, then had a lot of difficulty [in high school] because I was learning new material for the first time," and explained that teachers could have supported them in developing study skills by "finding materials to challenge me."

Plausibly, teachers may not prioritize supporting students' academic needs if the students do not seem to be struggling. One participant acknowledged, "there were kids

who needed more help than me." Another participant discussed feeling their academic interests were overlooked because they were deemed unnecessary:

> I often asked for things and didn't receive them because it wasn't necessary. For instance, I remember liking to do rote problems like long division in late elementary school, and asked for them but teachers dismissed my request because I didn't need practice. I had to search for them on the Internet, or other textbooks. (Constructed Response from a Participant).

In another response, a participant reported that they would have benefitted from more encouragement to push themselves:

> I could have used more support in terms of pushing me to go for more challenging courses (I was always in honors classes, but never recommended for AP courses and I think that hurt my college start). I didn't even know about the concept of AP classes until the end of my junior year. Also, as a first generation college student, it would have been nice to receive more support in researching colleges, applying to them, understanding the benefit of them... they assume that I am fine doing that all on my own because I was a good student, when in reality I really needed the support going into college. (Constructed Response from a Participant).

Ultimately, these findings may suggest that participants seem to want much more individual support than they currently receive. This suggests teachers, then, ought to provide students with a greater deal of support than they currently provide students with, regardless of students' backgrounds. Teachers should also provide students with a greater amount of support by spending more time on concepts they teach, and by providing them with greater opportunities to review material. Recognizing that participants also want to

be challenged at a level that is appropriate for them, teachers should be mindful of developing relationships with each individual student, so as to provide instruction that is best suited to their individual abilities.

Research Question 2: Do South Asian Americans feel their executive functioning academic support needs are met?

It seems that South Asian Americans may not feel that their executive functioning needs are met by teachers; on the composite scale for Desired Executive Functioning Support, participants' average score was fairly high ($\mu = 3.0$), suggesting that they want a great deal of support in developing their executive functioning skills; in contrast, the average score for Received Executive Functioning Support was not as high ($\mu = 2.5$). Additionally, most (69.4%) participants explicitly indicated that they could have benefitted from more support in building time management and organizational skills than they received from some teachers, which is a direct response to this research question. Further, a majority (70.6%) of participants, in an open-ended response, indicated that teachers could have better supported them or their academic needs. Language from the constructed response items, in addition to results from individual items that comprised the composite scales in the survey, provides further insights into this finding. Further, participants identified specific skills they wish teachers had supported them in developing (one participant wanted teachers to teach "more practical and hands on daily life concepts… not only focusing on academics," while another participant reported they would have wanted support developing study skills, because prior to high school, they had not needed them, and therefore "had no idea how to study").

Time management skills, chunking, check-ins, and reminders. Most (80%) participants indicated they would have found it helpful if teachers generally helped them develop their time management skills. Most (68.2%) participants indicated they would have found it helpful if teachers helped them manage time by checking on their progress while working on in-class assignments, most (67.1%) participants indicated it would have been helpful if teachers helped them process information by chunking content, and most (74.1%) participants indicated it would have been helpful if teachers reminded them to write down assignments and/or due dates to help them develop time management skills. Additionally, five participants explicitly listed support with time management skills as something teachers could have done to better support them, through their constructed responses. These findings suggest South Asian Americans may value these supports.

However, most participants (60%) indicated teachers generally did not help them develop their time management skills, over half (57.7%) of participants indicated teachers did not chunk information to better support their information processing, almost half (45.9%) of participants indicated teachers did not check in on their progress on in-class assignments, and almost half (48.2%) indicated teachers did not remind them to write down assignments and/or due dates.

Organization. More than half (56.5%) of participants wanted teachers to help them with strategies for staying organized. Additionally, six participants shared through the constructed response items that they were disorganized as students; one participant who shared they were "disorganized as a student… felt that more personal support from teachers in this regard would have really been helpful." However, fewer than half (48.2%) of participants reported their teachers actually provided this support; one

participant described help with organization skills as one of the "needs that weren't being met" by their teachers. Because so many participants indicated a desire for teachers to support their organization skills, it may be advisable for teachers to support their students in developing their organization abilities and skills.

Ultimately, these findings may provide some insight into how teachers can support students' executive functioning skills. The findings may indicate that teachers should provide students support developing time management skills, should chunk instructions, and provide students check-ins and reminders. Teachers should also support students in becoming organized.

Research Question 3: Do South Asian Americans perceive their K-12 teachers as culturally competent?

There is evidence that South Asian American students tend to perceive their teachers as not being very culturally competent. The mean score for the composite scale for Perception of Teachers' Low Cultural Competence (μ = 2.9, where a higher number indicates greater agreement with the idea that teachers lack cultural competence), as well as the fact that most (81.2%) participants indicated teachers seemed to know little about their cultural heritage compared with students from other cultures, supports this conclusion (the participant who, perhaps hyperbolically, reported that their teachers "were unaware of where India was on the map" serves as an example of this perception). Further, most (72.9%) participants indicated teachers did not understand them, their cultural identity, and their backgrounds. Participants also described, through the constructed response items, struggling with teachers' lack of cultural literacy (one

participant described teachers' struggle with pronouncing the participant's name as a contributing factor to "distance and awkwardness" between them). Language from the constructed response items also suggests teachers lack cultural competence. A discussion of specific examples follows.

Teachers' lack of awareness of South Asian American diversity. Over half (51.8%) of participants felt teachers lumped them in with other Asian American subgroups; language from the constructed response items also suggests participants feel teachers overgeneralize about their Asian American and South Asian American students. One participant shared that their teachers knew enough about South Asian cultures to know "the stereotypes," but not enough to understand "the differences between South Asians. They clumped us together and didn't understand we all spoke different languages and carried the baggage of different types of expectations based on our religion and ethnic groups within India." Another participant reported that "there was very little knowledge about how linguistically, religiously, and culturally diverse India is and was, even from teachers." Another participant reported "teachers saw me as a representative of all non-white, non-Catholic, 'pagan,' Hindu, Muslim, Latin, East Asian, Arab people." Another participant reported that teachers "thought we were all Hindu," another reported "a lot of them made assumptions that I was Muslim," and yet another reported that even a social studies teacher seemed to conflate two South Asian groups together:

> I'm Hindu, and my teachers knew that, but when one of my history teachers wrote me a college recommendation he referred to my temple as a mosque. I wasn't offended by the confusion, but I was surprised that my teacher, let alone a student of history, didn't know there was difference between the two religions.

(Constructed Response from a Participant).

Teachers' lack of cultural proficiency can lead to gross overgeneralizations about students' backgrounds and cultures that reflect that low proficiency. Students become aware of this low proficiency, and as evidenced by their comments, seem to resent it.

Teachers' assumptions. Most (63.5%) participants expressed teachers made assumptions about them based on their cultural background in the closed-end portion of the survey, which is consistent with comments made in the constructed response items. Many participants reported teachers made general assumptions about them (one participant stated teachers "made generalizations about me" by "assuming I was like all other Indians," while another stated "I think they had general ideas of what Indian people should be like and I fit into that stereotype"), or about their skills and inclinations (one participant struggled with "teachers trying to put me in ESL classes because I speak another language at home"), without getting to know the students as individuals (one participant stated "more things were assumed rather than understood or discussed").

Many participants felt teachers assumed they enjoyed or were naturally gifted in math and science; one participant reported, "there was a strong assumption I was good at mathematics, which was incorrect," while another stated, "they seemed to assume that I would do well at math when I didn't even like the subject." Another stated that "not all of us wanted to pursue math and science." Similarly, another participant shared "I think that being Indian-American, it was automatically assumed that I was a star in math/science… I often struggled with math and I would have appreciated more support."

One participant shared that their teachers' belief in this stereotype came at the cost of recognizing possible interest or skills in creative areas: "Teachers assumed I was

serious about studies only, because other Indian students were, even though I had lots of creative interests that no one encouraged me to pursue." Another participant described not feeling encouraged to do their best in language arts classes, by teachers who seemed to encourage them to focus on math and science. Yet another participant shared a similar sentiment, and shared that "if the teachers could have recognized and supported us in pursuing our actual passions… then many of us would've figured our college careers out much quicker." Such comments suggest participants may feel their experience is negatively impacted by teachers' stereotypes.

Teachers believe the model minority myth. Participants' comments suggest teachers do, in fact, seem to believe the model minority myth, and language from the constructed responses suggests students recognize when they are being held to a different standard than their peers. Most (77.7%) participants felt teachers assumed they were smarter than students from other cultural or racial groups (one participant shared that their teachers believed "the stereotype that Indian people were smart, but did not know much more than that," and another shared, "I felt like my teachers expected more out of me compared to other students"). Most (68.2%) participants also reported feeling teachers believed they needed less help than their peers from other cultural or racial groups. Most (64.7%) participants felt teachers believed they needed less help developing their time management and organizational skills than their peers from other cultural or racial groups (one participant reported "expectations were often set higher for Asian students than for students of other backgrounds").

While it may seem that the belief in the model minority myth may be somehow a positive thing, there is evidence that it is actually problematic for students; comments

from the constructed responses do suggest that teachers' belief in the model minority myth translates into treating some students differently (one participant reported that they "would have appreciated more support" from teachers who made assumptions about them based on their background). Holding students to a higher standard than their peers is not merely a nuisance; it can lead to the needs of these students being overlooked. One participant reported "students from other backgrounds were given more attention in the classroom than students of Asian background," suggesting teachers' belief in the model minority myth results in Asian American students being overlooked. Another participant revealed teachers "assumed I needed no learning assistance, and used me to help other students." Yet another participant described struggling in school because "teachers assumed I was already very smart and motivated," and that "I was someone who didn't need help being motivated or supported through academic struggles." Still another participant's teachers falsely "assumed I was self-motivated, due to a stereotypical Asian family whereas I received no support at home in my academic endeavors." This participant could have clearly benefitted from more support and encouragement, but encountered teachers who mistakenly believed they already received that kind of support at home, and so, overlooked them.

On the other side, some participants actually do suggest they fit, or identify with, the model minority myth. In some cases, these participants feel this contributed to a more positive relationship with teachers (one participant shared that they had a good relationship with teachers, but qualified this by sharing that they actually fit the model minority stereotype), which might suggest a perception that teachers prefer South Asian American students who fit the stereotype. In spite of this, they may still not want to be

held to this standard; one participant, who identified with the model minority stereotype, still struggled with teachers comparing them to other Indian or South Asian classmates.

In fact, seven different participants shared their experience of wanting to feel more "encouraged" by teachers who seemed to believe they did not need encouragement. In some cases, this stemmed from needing encouragement they were not receiving at home; one participant shared that "I was viewed as unimportant to support as I must have academic support at home," which was incorrect. If teachers' stereotypes about South Asian American students include the idea that these students already receive academic support at home, they may overlook the students' needs for encouragement. Another participant share that "it would've been nice to be supported in a way where my teachers could help me pursue things that I was passionate in." Yet another wished they had been "encouraged to explore the arts and humanities, not just STEM fields," and another wished teachers "had counseled thinking deeply about what I want to study in college, as opposed to just fulfilling the cultural expectations of what I should do."

Participants' experiences with teachers' low cultural competence, and their tendency to hold South Asian American students to a particular standard that may not necessarily be appropriate, may be harmful. One participant described how "teachers we always more disappointed in me when I did worse in math and science," in spite of the fact that the participant had always struggled in these content areas and could have actually used more support. The participant felt pressure to succeed in something they were not good at, and then had to contend with disappointment for not succeeding. Further, teachers' belief in the model minority myth may result in students being overlooked who might otherwise benefit from further support or attention. Another

participant reported “more teachers assumed I was fine when I wasn't, based solely on my heritage.” Yet another participant shared “the model minority myth also led to teachers overlooking the issue that many Asian-American students suffer from mental illnesses.” If teachers’ belief in the model minority myth leads to even one student suffering, who could have otherwise been aided by teachers’ intervention or connection, then there is, indeed, a need to address this dangerous stereotype.

Various demographic environments. Language from the responses suggests teachers’ low cultural competence is not a phenomenon restricted to schools with primarily White or Black students; even students who reportedly attended schools with high populations of Asian and South Asian Americans shared perceptions of teachers’ low cultural competence (only one participant, who reportedly went to “a high school where the Asian population was 50%,” claimed their teachers understood their culture). Some participants attributed this tendency to the demographics of their school or town. Two participants attributed their teachers’ confusion to the predominantly White population (one of these participants reported that because of the predominantly White student body, “there was very little exposure to Indian Americans”). Another participant attributed teachers’ lack of awareness to the culture in their minority-majority school stated that at their school, where “you were either White, Black, Hispanic, or Asian.” However, even a participant who attended a school with a large South Asian American population reported teachers “seemed to assume we were all the same.” Another participant attributed teachers’ lack of cultural competence to the media, stating that teachers had “false perception of Indians based on what they see on TV.” These instances suggest that even when teachers work with few or many South Asian American students,

their cultural proficiency remains low, and that mere exposure to more students of a particular population is insufficient as a means of improving their proficiency. This has implications for interventions, and is also an important note about not assuming diversity alone begets proficiency.

Expecting students to be an ambassador for their culture. Some of the constructed response items suggest many people may have the experience of having to be a cultural spokesperson for their ethnicity. 11 different participants reported having an experience in which teachers expected them to speak about India or educate others about it. One participant shared that they "often acted as an ambassador" for their cultural background. Another stated that their teachers "treated me like any of the other kids, except for when the topic India is brought up. Then they'd assume I was an expert on Indian culture and ask me very general or stereotypical questions about Indian attitudes on subjects such as marriage or grades or jobs." Some students may not mind this responsibility (only one participant described enjoying this responsibility: "we were all different and I knew that and if a teacher asked anything about my culture, I'd love explaining it"), others may not appreciate it (one participant shared that "while it was annoying to be singled out during class, it made no lasting impact" on them).

In some cases, students may even put pressure on themselves to be an ambassador for their culture. One participant described coming across incidents of Hinduism being "misrepresented" in the curriculum, and felt compelled to make a contribution. Still, the participant described their frustration with having to speak on behalf of their cultural background: "I did try to connect but then I also thought, who do I have to be the only voice of examining my culture." Another participant reported that they shared their

cultural background with a teacher in an effort to better connect with them; the teacher eventually better understood the participant and went on to become their mentor, but the participant described thinking “I shouldn't have to do all this educating and work.” These anecdotes suggest that even in best-case scenarios, when a student does not have serious qualms with being expected to serve as a cultural ambassador, they may still resent it.

In other cases, the responsibility for a student to be a cultural ambassador does not even make sense. One participant wondered how “I could be a spokesperson for a country whose people make up over 1/8 of the global population.” Another participant shared the experience of studying India in school, and their fifth grade teacher “asking me if I thought the books were accurate; she seemed to think my ethnicity made me an expert on India, never mind I was 10 years old.” Another participant shared, “my family doesn't celebrate Diwali but I always had to talk about it,” while yet another reported that their seventh grade Social Studies teacher “asked me a million questions when we were studying ancient India--like I knew anything.”

In other cases, the responsibility to be a cultural ambassador may not benefit the student; one participant described how in Social Studies and History courses, “I was always assigned to the India group and was expected to bring items from my house to enrich the class with diverse experiences, while learning nothing myself.” Additionally, this responsibility may be unpleasant or embarrassing for them; one participant reported that teachers “did not understand why I would be embarrassed about talking to Hinduism in front of the class, even when all the other students were making fun of it.”

Ultimately, these findings may suggest that teachers should become more aware of South Asian Americans' backgrounds and their diversity, not make assumptions, not

hold stereotypes (including the model minority myth), and should not assume that because they interact with many South Asian students they are automatically an expert. They should also not expect students, regardless of background, to be a cultural ambassador and speak on behalf of their entire culture.

Research Question 4: How connected to school do South Asian Americans feel?

Generally speaking, it seems South Asian American students have varying levels of connectedness to school, and diverse overall experiences. Slightly more students have an overall positive experience of schooling and feel connected to their schools than those who do not. Students' overall connectedness and experiences were examined through the composite scale for students' "connectedness" to school, and the average score for the composite scale for Lack of Connectedness to School was $\mu = 2.6$, suggesting that students felt more connected than disconnected from school. However, more than half (58.8%) of participants felt peers from other cultural groups felt more "connected" to the school than they did, suggesting that there is room for improvement, and many participants described their experiences of not feeling connected to teachers (one participant reported not feeling "connected on a personal level" with teachers; another reported feeling a "distance" from teachers), or peers in their constructed responses.

In spite of having room for improvement in regards to South Asian Americans' connectedness to school, generally speaking, it seems most South Asian Americans have an overall positive experience of school; over half (61.2%) of participants indicated, through an open-ended response, that their "overall experience" with schooling, in context of their relationships with teachers, was positive (27.1% indicated that their

overall experience was neither positive nor negative, and 11.8% indicated that their overall experience as a student was negative). One of these participants described their experience as "good for the most part," and another described it as "good and memorable." Some participants indicated that they had good relationships with teachers in their discussion of their experience; one participant indicated that they "had a very good relationship with teachers who treated me equally to other students."

However, even among those with good overall experiences, most answers included references to negative experiences with teachers as well (the participant who described their experience as "good for the most part," also included a discussion of a negative experience with a teacher who assumed they had expertise on Indian culture). This may suggest that students are having a good experience despite having negative interactions or relationships with teachers, rather than because of their relationships with teachers; only one participant described having positive experiences and relationships with teachers, who went out of their way to connect with them and understand their culture (the participant's teachers attended cultural events to support the participant). However, this participant's experience is the exception that may prove the rule. These findings may suggest that students' overall experiences could be greatly improved if teachers were more culturally competent.

Over a quarter of respondents (27.1%) had an overall experience that was neither positive nor negative. Some of these participants' pointed to teachers' low cultural competence as a factor in their average or fair experience (one participant specifically referenced struggling with teachers who believed the model minority myth; another participant attributed their "mixed experience" to teachers who "expected me to be

smart"). Still others stated that they had some good experiences in school, but "never connected" with teachers, which may be closely related to their teachers' low cultural competence (one participant described teachers who held "underlying, incorrect assumptions about my family," such as believing her "must be so traditional and oppressive! And about what being Indian and a young woman meant in terms of my personal and political views," rather than getting to know her as an individual.

Another participant reported wishing they had received more opportunities to seek mentorship and guidance from teachers, and indicated "I don't think primary schools are always equipped for this - especially for minority students." The few (11.8%) respondents, who described having negative overall experiences as students, serve as further evidence that there is room for growth.

Not feeling understood. Almost half (47.1%) of participants felt their teachers did not seem to understand them as people, and most (72.9%) participants indicated through the constructed responses that they did not feel their teachers understood them, their cultural identity, and their backgrounds; one participant explicitly stated, "I distinctly and specifically felt like I didn't fit in and that no one understood my cultural heritage throughout elementary school." Such a strong statement, reflecting a sense of not feeling understood, clearly demonstrates the importance of cultural competence, and of teachers making an effort to understand their students. Such comments indicate that students' experiences can be harmed by teachers' lack of cultural proficiency.

Further highlighting this concept, another participant shared that they wished their teachers "made more of an effort to learn about who I was, especially as a student of color and an Indian American student," and yet another participant wished "teachers took

more time getting to know me versus making assumptions based on stereotyping." Yet another participant shared that there seemed to be a "lack of effort to understand my culture and background beyond that of a stereotypically smart student." This sense of not feeling understood connects back to students' perceptions of teachers' low cultural competence, especially as related to the perception that teachers often made assumptions. These many examples demonstrate that when teachers lack cultural competence, students are, in fact, aware of it; they recognize that lack of cultural competence, and their experiences in school, including their sense of feeling understood, are impacted by it.

Culture and a sense of belonging. Many participants who did not feel particularly connected to their schools identified their cultural background or race as a factor in their lack of connectedness with teachers (one participant shared "I didn't feel close to any of my teachers in elementary school, the way others might have. I felt like race was part of the reason") as well as peers (one participant explicitly stated "cultural differences made it more difficult for me to fit in"). One participant shared that in a post-9/11 world, they struggled with being "a kid that looked Arab," and said, of their peers, "none of them wanted me there." In another case, a participant described feeling somewhat connected to school, but admitted, "I also tried to assimilate a great deal," suggesting that their sense of connectedness may have come at the cost of maintaining a distinct cultural identity. In one case, in which a participant did report a sense of connectedness to their school, they seemed to attribute this sense of connectedness to having found refuge in a community of peers from the same cultural background (the participant shared doing "better during after school activities that involved South Asian clubs"). These findings seem to suggest that connectedness to school can be influenced

by a sense of belonging or not belonging, which can be tied to how their race or culture is perceived or understood by those around them.

Teachers' role in connectedness. Some participants reported feeling that they did not feel comfortable connecting with teachers, suggesting teachers could have done more to make them feel welcome. One participant reported feeling like teachers were "just looking for mistakes or problems" rather than trying to be supportive or forming a connection with them. Another participant shared that they were "never particularly close to teachers," because they were "taught to respect" their role. Another reported feeling "very disconnected socially from my teachers. I rarely if ever approached them for help or around areas of my interest until very late in my high school years." These findings suggest teachers could improve students' feeling of connectedness to them by making themselves more available to students, and trying to connect socially with them.

Some participants also felt teachers did little to help mitigate issues they faced in feeling connected to their peers. One participant reported wishing that teachers did more to "sense that a student feels left out or unconnected," and stepped in as necessary. Another participant, who attended a majority White school, reported "very little encouragement for different cliques to mingle," and suggested, "teachers could have encouraged more group activities and cooperation." Other participants suggested teachers could have played a larger role in promoting their connectedness to school; one participant described not being encouraged to participate in theater, and shared that when they did participate, they felt overlooked. The participant went on, "a teacher could have been helpful in making me feel included then." Participants' experiences of a lack of connectedness can be directly attributed to inaction on the part of teachers. However,

teachers can help students feel connected by offering them that "important intangible element" of school that many White American students may receive from their teachers: "mentorship and social bonding" (Harpalani, 2009, p. 77).

Teachers' role in stopping prejudice and racism. Some participants described instances or experiences of prejudice or racism, and highlighted teachers' lack of support. One participant described being mocked and bullied about their Indian and Hindu heritage, by "ignorant classmates," and shared that "my teachers did very little to intervene in these hurtful instances." In such instances, teachers are actually allowing a culture of racism to thrive in their school environments, which suggests they have a role in these negative experiences. Another participant stated teachers "tend to ignore how jokes about cultures make affect their students," and that they should be "more aware of how other students treat students of different cultures." Another student shared that they wish teachers would "stop racist bullying earlier." In these cases, by ignoring racist jokes, or allowing bullying to occur, teachers inadvertently contribute to or condone racism.

Participants who did not feel a connection to their school or teachers described some of the negative impacts of this lack of connection on other areas. One participant pointed out that social challenges they faced had an impact on their academic experiences as well, and wished teachers had been more cognizant of this dynamic. Another participant, who "very rarely had teachers who were memorable because they never connected," shared that their grades suffered (they were "horrible" in some subjects) as a consequence of the "huge disconnect" they felt. Another participant shared a similar experience, and shared that that not having "any outlet" for issues they faced "made it difficult to focus," especially on challenging courses. Such examples illustrate the

negative impact a lack of connectedness to school has on overall experience, suggesting that connectedness is an important component of overall experience, and that it is important for teachers to help foster their students' feelings of connectedness.

These findings may suggest that teachers should help make students of all backgrounds with their overall experience in schools by helping them to feel understood; this can be accomplished by making an effort to learn who students are, and building relationships with them. Teachers can also help students develop a sense of belonging by creating an environment that does not tolerate racism or exclusion, and makes students feel welcome. Teachers have an important role in helping students feel connected to school and to one another; they can help or harm. Teachers are essential to stopping prejudice and racism and must not take this responsibility lightly.

Implications of Additional Findings

Certain correlations between variables may provide implications for combining scales, and may also provide insights into experiences of South Asian Americans.

Desired Support and Received Support

The correlation between Desired General Academic Support and Desired Executive Functioning Support ($r = 0.4$; $p = 0.001$, which is extremely significant) seems to make sense intuitively: students who want general academic support may also want support in developing executive functioning skills. This may suggest that the desire for general academic support and executive functioning skills support represent a desire for support from teachers. Indeed, many participants who described wanting more support from teachers in their constructed responses did not make distinctions between the two

kinds of support (one participant described simply “needing help,” another described needing more “help with certain areas,” yet another described wanting “personal support,” and another wanted “more support”).

While there may be a need for further research to verify this, there may be value in combining the scales for Desired General Academic Support and Desired Executive Functioning Support into a single scale for Desired Support may be advisable. Moreover, a combined scale also yields a high value for Cronbach’s alpha ($\alpha = 0.9$). This is considerably higher than the value for Desired General Academic Support ($\alpha = 0.7$), and very close to the already high value for Desired Executive Functioning Support ($\alpha = 0.9$). Combining the two may also make sense in surveys, since students are not necessarily experts in the types of support teachers can provide, and may not make a distinction between receiving support that helps them understand specific content and receiving support that helps improve their skills; they may perceive both are supports teachers should provide. As expected, the mean score for the combined scale ($\mu = 3.0$) is fairly high, reflecting a high level of Desired Support from teachers. This is consistent with the reported high level of Desired General Academic Support ($\mu = 3.1$) and a reported high level of Desired Executive Functioning Skills Support ($\mu = 3.0$).

Similarly, Received General Academic Support is correlated Received Executive Functioning Skills Support ($r = 0.7$; $p < 0.00001$, which his extremely significant), suggesting participants who reported receiving higher general academic support were also likely to have received executive functioning skills support. This, too, makes sense; students do not likely distinguish between receiving general academic help and help that supports their executive functioning skills. While there is a need to formally examine

this, there may be value in developing a combined scale for Received Support, which yields a high value for Cronbach's alpha ($\alpha = 0.9$, compared to $\alpha = 0.7$ for Received General Academic Support, and $\alpha = 0.9$ for Received Executive Functioning Support). It may therefore make sense to consider the two kinds of support as components of one larger variable: Received Support. The mean score for the combined scale is $\mu = 2.5$, which is consistent with the mean score for Received General Academic Support ($\mu = 2.6$) and Received Executive Functioning Support ($\mu = 2.5$).

Combining Connectedness and Cultural Competence

It may be that low cultural competence can impact students' relationships with teachers can, in turn, impact students' overall connectedness to school. Unsurprisingly, Lack of Connectedness to School is highly correlated ($r = 0.6$) with perceptions of Teachers' Low Cultural Competence; students who perceived their teachers as having low cultural competence were highly likely to report not feeling as connected to school. It may be advisable to combine the scales for Lack of Connectedness to School and Perceptions of Teachers' Low Cultural Competence. The mean score for a combined version of this scale is $\mu = 2.8$, which is consistent with the scores for the individual scales ($\mu = 2.9$ for Perceptions of Teachers' Low Cultural Competence, and $\mu = 2.6$ for Lack of Connectedness to School). Combining the eight survey items comprising these variables into a single composite scale results in a highly reliable consolidated scale of student experience, with a higher value for Cronbach's alpha ($\alpha = 0.9$) than either of the individual scales (Perceptions of Teachers' Low Cultural Competence has a value of $\alpha = 0.7$, and Lack of Connectedness to School has a value of $\alpha = 0.9$). This may suggest

connectedness and perception of cultural competence are not isolated concepts; instead, teachers' cultural competence may be intimately connected to students' connectedness to schools. A combined scale for Connectedness and Perceived Cultural Competence could serve as a measure of students' Negative Experiences.[9]

Given that a sense of connectedness to school appears to be so closely related to teachers' cultural competence, it seems logical to think of cultural competence as a predictor of students' connectedness to school; when teachers lack cultural competence, students may, in turn, suffer due to a lack of connectedness to their experiences in school. Conversely, if teachers are highly culturally proficient, students may feel more connected to their experiences. Thus, it is important to point to the need for high teacher cultural proficiency. Because teachers' cultural competence may be a predictor of students' connectedness, which is, in turn, linked to students' overall experience in school, teachers must recognize that they have a responsibility to develop their cultural competence.

Negative Experience and Teachers' Understanding of Students

Given that there exists a statistically significant at the 0.10 level, between responses to Students' Overall Experience in Context of Relationship with Teachers, and Teachers' Understanding of Student ($r = 0.2$; $p = 0.07$, which is significant at $p < 0.10$; refer to Table 10), it is reasonable to imagine a relationship exists between students' overall experiences of school, and their perception of feeling understood by teachers.

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[9] The mean score for the combined scale is $\mu = 22.4$ ($SD = 5.5$), with a range from 8 to 32 (higher number indicates a more negative schooling experience).

For example, for those who indicated that their overall experience was generally negative, certain themes emerged in constructed responses. In particular, individuals with this experience expressed feeling that teachers lacked cultural proficiency related to Indian and South Asian American students. Participants' negative experiences ranged from well-meaning teachers who lacked cultural literacy to teachers who were prejudiced. One participant said that teachers "made generalizations about me, assuming I was like all other Indians, and another stated that teachers "thought we were all Hindu." Another participant stated that they "had teachers that told me I was going to hell." Another participant stated that teachers were "ignorant, prejudiced," and the same participant described their overall experience in school as "painful."

Even of those who indicated that their overall experience was generally positive, most of these still felt their teachers did not understand them. Many participants identified incidents of teachers exhibiting low cultural competence. One participant indicated that in spite of a "great relationship" with their teachers, they noticed "a lack of effort [from teachers] to understand my culture and background." Of these respondents who had good overall experiences, many indicated recognizing that their experiences were unique, or that they were exceptionally good students (two participants self-identified as being a "teachers' pet" in their answers).

These findings demonstrate that there may be a strong relationship between teachers' connectedness to their students, and those students' overall experiences. Therefore, teachers should recognize that they have a great responsibility to have a high level of cultural proficiency, which would facilitate better relationships with students, which would, in turn, improve those students' sense of connectedness and overall

experience in school.

Recommendations for Practice and a Review of Relevant Literature

The findings of this study may suggest that there is room for improvement regarding South Asian American students' connectedness to school, especially in the context of the support they receive from teachers, and in the context of their teachers' cultural competence. At the core of this work is the belief that each student is deserving of being treated as an individual and that teachers have a responsibility to provide each student, no matter their background or any stereotypes that may exist about that background, this consideration. For teachers, understanding a student's culture, while simultaneously contextualizing that knowledge as only a single component of their perception of that student, is a part of this duty. This is a complex and demanding task, and teachers, who are often tasked with unending complex demands, can rise to the occasion and meet the charge with great success. Moreover, as the teachers interviewed in the pilot study indicate, this may be something they are willing to do. In order to do so, however, they must have great cultural literacy and proficiency, and in order for this to be possible, high quality cultural proficiency training must be made available to teachers. Thus, schools and districts should focus on raising the caliber of entering and existing educators (Mourshed, Chijioke, & Barber, 2010). In practice, this translates to providing teachers with high quality cultural proficiency training, and encouraging more South Asian Americans to enter the teaching force.

Providing Support to Students

Many students may already be successful academically, and have a positive

connection to school; however, they could be better with greater support from teachers in building and developing their academic skills, and their executive functioning skills. While some participants reported feeling their teachers did not owe them any extra support (one participant shared, “I think it was my responsibility to seek out help if I wasn't getting it”), the task of good teaching often involves knowing students well enough to recognize when they might benefit from more support. Further, while some students need support in these areas in order to get from good to excellent, many students may need a great deal of support in these skills just to catch up.

Further, because there is a strong relationship between students’ desire for general academic support and executive functioning skills support, it may be wise for teachers to think about the two as important components of supporting their students. Teachers should provide students with a great deal of support, both in strictly academic contexts, and in developing executive functioning skills, and should be aware that students may not necessarily distinguish between the two kinds of support, but may rather see support of any kind as simply a form of help from teachers.

Supporting general academic skills. The findings on students’ general academic support needs may suggest teachers might better support South Asian American students by not making assumptions about the students’ needs or understanding of complex topics, based on stereotypes about their backgrounds. Additionally, the findings may suggest three specific things teachers can do to support students’ general academic skills:

1. Pay more individual attention to each student, including giving more individual support, and being more vigilant of students’ progress.
2. Spend more time on complex topics, and be available for helping students who

need more review, or have more questions.

3. Attempt to recognize the individual needs and levels of each student, and challenge them appropriately when possible.

While teachers should not overgeneralize and assume their South Asian American students are all smart, they should also recognize when material is not challenging enough for these students, as well as any others, and encourage them to push themselves.

Support students' executive functioning skills. These findings also suggest that it may be helpful for teachers to explicitly teach time management skills, and to support students with managing their time in class through check-ins, and reminders to write down due dates. The findings suggest five specific things teachers can do to better support their students in developing their executive functioning skills:

1. Help students develop their time management skills.
2. Use chunking when giving complex or lengthy instructions.
3. Remind students of due dates, and encourage them to record them.
4. Help students develop their organization skills.
5. Explicitly teach study skills to students.

Many students describe themselves as struggling with these skills; consequently, it may be valuable for teachers to help students in further developing these skills.

Improving Teachers' Cultural Competence and Students' Overall Experience

Ultimately, there is a need to improve teachers' cultural competence as related to supporting their South Asian American students; given that this might be closely linked to students' overall experiences, which is consistent with existing findings that teachers'

lack of cultural proficiency has harmful effects on students (Chang & Sue, 2003; Parks & Kennedy, 2007). Improving teachers' cultural competence, by making teachers more proficient regarding the diverse cultural, religious, economic, and personal life experiences of their student populations, may, therefore, improve students' overall experiences. Improving their proficiency may also, in turn, improve teachers' personal efficacy in supporting those students, which may then improve the quality of their interaction with them (JohnBull, Hardiman, & Rinne, 2013). Consequently, there is a need to provide teachers with, as one participant indicated, more "culture and diversity training." Cultural proficiency should be manifested at every level of education, from policy-makers down to individual teachers (Cross, 1989). All teachers should possess deep knowledge of issues related to cultural diversity, and it is necessary that teacher education programs promote cultural competence in teachers (Taylor, 2010). Further, it is advisable for educational institutions to focus on improving instructional quality by "shaping the professional" (Mourshed, Chijioke, & Barber, 2010).

As one participant, who reported an overall fair experience as a student, "my teachers did educate me, but I do feel that the assumptions teacher's made based on my cultural identity about my intellect robbed me of a better experience in elementary school and high school." This participant's view may be sufficient evidence that teachers' low cultural competence prevents some students from having the best possible experience in school that they could have had. Further, teachers' lack of cultural competence can impact not only students' connectedness to school, and overall experiences, but their sense of self (one participant shared that because of "assumptions" teachers made about them, they "became embarrassed of my cultural identity").

Teachers' time is often already stretched then, and the experiences of South Asian American students may lower on the list of priorities (one participant reported their teachers were already "overburdened," and "had much bigger problems than me"). However, teachers have a responsibility to be culturally proficient and support all students (Gay, 2002; Hammond, 2014; Ladson-Billings, 1995; Nieto, 2013). However, this may not reflect reality; many students may feel resigned to expect low cultural competence from teachers. Indeed, one participant lamented, "a predominantly white faculty was teaching to a population of majority second-generation Asian immigrants. There was always going to be a disconnect there." While teachers may have varying levels of cultural awareness or competence, and may be at different levels of multicultural support ability (McAllister & Irvine, 2000; Nieto, 2008), comments such as these suggest that there is much room for improvement in teachers' cultural competence, especially as related to supporting their South Asian American students.

This is particularly important, given that cultural proficiency can greatly impact student experiences and outcomes (Guerra & Nelson, 2007; Klem & Connell, 2004; McNeely & Falci, 2004). In improving specific components of their cultural competence, there are five key changes teachers can make, and two changes other educators can make, to better support South Asian American students, and improve their overall experiences:

1. Teachers can recognize that South Asian American students are a diverse group.
2. Teachers can avoid making assumptions, and in so doing, let go of the model minority myth.
3. Teachers can know when to (and when not to) bring up students' cultural backgrounds.

4. Teachers can build stronger student-teacher relationships (and provide more opportunities for mentorship).
5. Teachers can develop a more inclusive, multicultural environment.
6. Educational leaders should recruit and train more South Asian American teachers.
7. Educational leaders should provide teachers with quality proficiency training.

Recognize diversity among South Asian Americans. Teachers should avoid treating all South Asian Americans as one homogenous population, and should recognize that there is diversity among these students. As Rahman and Paik (2017) assert, there exists great diversity within South Asian ethnic communities, and as such, the monolithic view of South Asians should be challenged.

Avoid assumptions, including the model minority myth. Teachers should avoid making assumptions about their South Asian students' skills, preferences, and interests, since believing stereotypes about students is harmful (Chang & Sue, 2003; Lee, 2015; Parks & Kennedy, 2007). In this effort, teachers should also let go of their belief in the model minority myth may translate to treating them in a way that overlooks their needs, thus doing them a disservice. As one participant shared, teachers should be "providing equal attention to all students rather than just focusing on a select few." South Asian American students may have academic support needs that are not always met, and may be excluded from certain educational opportunities or experiences as a consequence of teachers' low cultural competence or belief in the model minority myth; indeed, teachers should not assume students from some races need less help than others, and should give them as much attention and help as they would offer students from other backgrounds.

Know when to (and when not to) bring up students' backgrounds. Teachers

have the difficult task of having to know when it is appropriate to bring up a student's cultural background, thus recognizing and honoring its role in that student's unique identity, and when it is inappropriate. As demonstrated by the great many comments in the constructed responses, teachers may often expect students from South Asian backgrounds to serve as cultural ambassadors for their communities, which may be uncomfortable for the students. As one participant shared, they just "wanted to blend in."

There may, however, be times when it is appropriate to connect with students about their cultural backgrounds. One participant shared that their culture "didn't come up, even when it should have," demonstrating that there are instances in the classroom where it is appropriate for a teacher to ask about a student's background, or allow them to share. Discussions of culture or diversity might be such appropriate situations in which to ask about students' background.

Connecting with students about their backgrounds might also be appropriate might be in times of great turmoil, but these instances must be handled with great care; one participant described struggling with perceptions of brown-skinned South Asian Americans following 9/11. The participant shared that their teachers "did not know how to handle incidents where my different cultural background was brought up in a class setting," and described how "no one spoke to me about the 9/11 terrorist attacks and how it affected me." Teachers must be particularly mindful of the "racism and discrimination within society and schools" that so many South Asian Americans contend with (Rahman & Paik, 2017, p. 28). Teachers must be sensitive, and support these students.

This should be balanced with the recognition that students should not be expected to be the cultural ambassador for their ethnicity or family backgrounds. The participant

who described having their fifth grade teacher ask them to make commentary about the accuracy of content they were studying about India expressed that while their overall experience in school was good, this was one of the "few times I wondered what they [teachers] were thinking."

As a general rule, it may be best for teachers to consider whether it is fair to ask a student to speak on behalf of an entire population. While teachers may have no ill intent, and may simply be expressing curiosity or interest when asking students to teach them or their peers about their cultural backgrounds, it is important to recognize that this is likely not a demand they would place on their White American students. One participant's suggestion may be a good guideline: Teachers should "acknowledge cultural background, but don't make it a focus unless student desires to do so."

Stronger teacher-student relationships. Teachers should make the effort to forge connections with students by getting to know them as individuals; literature on education and social neuroscience support the idea that the socio-emotional components of teaching are essential supporting students in becoming global citizens (Donahue-Keegan, Karatas, Elcock-Price, & Weinberg, 2017). There may be room for improvement in this endeavor (one participant stated "I wish my teachers took more time getting to know me versus making assumptions based on stereotyping"). Further, because some participants described feeling "disconnected" from teachers, it may be helpful for teachers to take the lead on connecting with their students. Making strong student-teacher connections may require that teachers make the effort to understand each of their students as individuals. One participant, who described wishing "that my teachers (especially in elementary and middle school) made more of an effort to learn about who I was,

especially as a student of color and an Indian American student," also shared that "the ones that did [make an effort] I formed a powerful bond with and I talk to them to this day." This participant's experience may suggest that when teachers make the effort to connect with students, and understand their experience, they can better connect with them. Another participant described facing a "unique challenge" as a minority, which impacted their ability to concentrate in school; they shared that they wished teachers had been "more cognizant of the impact social challenges presented on academic needs." This participant's experience, too, suggests that making the effort to understand individual students' experiences and challenges can help support their needs, and might also naturally result in a better student-teacher connection.

In so doing, teachers can also provide opportunities for mentorship to their students who may need such connections. One participant, who described wishing there had been greater opportunities for mentorship and guidance, pointed out that schools might not always provide these for students. Possibly, providing students with greater opportunities for mentorship may be well received.

Promote an inclusive, multicultural environment. Many participants described feeling less connected to school due to cultural or racial differences, suggesting that connectedness to school may be impacted by how much a student feels they belong. Given that some participants described how teachers could have better promoted student interaction across cultural and social groups (the participant who suggested "teachers could have encouraged more group activities and cooperation" also reported shared that there was "very little encouragement for different cliques to mingle"), it may be valuable for teachers to promote more interaction. While "few teachers would continue to act in

ways that they believed would endanger the educational opportunities of their students," racism, inequality, and unfairness regarding opportunity or educational experience are often a part of the schooling experience, even when doing what is "seemingly wonderful for students" (Hyland, 2005). This naturally creates hierarchies and divisions in multicultural environments. Thus, teachers are tasked with the particularly challenging task of fighting and decreasing that unfairness or racism, and creating an environment that is inclusive and supportive of all students.

Teachers must not only be thoroughly prepared for instructing diverse classrooms, but they, along with other school leaders, can also encourage and facilitate an accepting and tolerant environment (Banks, 2015; Taylor, 2010). As Banks (2015) describes, teachers and educators have a responsibility to structure the culture and organization of a school in order to empower students and promote equity for all. This is particularly important in cases where students describe being discriminated against; as one participant shared, "teachers could be more aware of how other students treat students of different cultures." Because many participants described instances of being mocked, bullied, or otherwise discriminated against, and described their teachers' lack of intervention in these incidences, it may further be advisable for teachers to take the lead on fostering a more inclusive, supportive, tolerant, and accepting multicultural environment in their classrooms and in school. This is not only the task of teachers; a school's organization structure on the institutional level, its policies and procedures, and the involvement of the entire school and surrounding community all play a role in cultural responsiveness (Taylor, 2010).

Considerations for cultural proficiency training. Existing literature provides

guidance and best practices for developing cultural proficiency training. Proficiency training should be explicit and specific (Parks & Kennedy, 2007), yet adaptable, since cultural competence includes a teacher's ability to continuously build on existing knowledge of the diverse cultural norms of students and their communities (National Education Association, 2015). In the case of improving cultural proficiency related to South Asian American students, this may present a greater challenge, since literature on the needs of Indian and other South Asian American students is still limited. However, developing professional development drawing from the existing literature that examines Asian American students more broadly, and from existing multicultural education and cultural competence may be a good start. Improved cultural competence regarding their South Asian American students specifically would enable teachers to recognize the diverse ability levels, needs, and experiences of these students, leading them to stereotype these students less frequently.

A mandatory cultural proficiency program would help enable teachers to improve their practices, and provide diverse students with culturally responsive support. This becomes more important when we consider that some participants reported having had teachers with low cultural proficiency even when they attending schools with high South Asian American student populations. This suggests that simply being exposed to more diverse student groups does not automatically improve teachers' cultural competence; improving proficiency requires explicit intervention. It may be particularly important to provide such training for newer teachers; as Balfanz, Legters, and Byrne (2012) point out, inexperienced or new teachers can present challenges for high minority population schools; it is possible that this may also impact South Asian American students, who may

often be minorities. Given that the findings suggest that low cultural competence may negatively impact students' experiences, it is be advisable to next implement a professional development program to improve teachers' cultural competence. However, perhaps as a direct result of the lack of existing literature on South Asian Americans, few such programs exist.

Recognize teachers have differing levels of multicultural awareness. Since teachers do have differing levels of multicultural awareness (McAllister & Irvine, 2000; Nieto, 2008), it may be advisable for cultural competence training to account for this. Training should engage teachers' existing beliefs, since encouraging teachers to become more aware of their own cultures, race, and potential biases tends to improve the effectiveness and relevance of cultural proficiency training (McAllister & Irvine, 2000). McAllister and Irvine's (2000) study, while not specific to methods for improving cultural competence regarding Indian American students specifically, provides insights into improving teachers' overall cultural competence and proficiency may have value in developing proficiency training. Responding to increasing challenges teachers in multicultural classrooms face, McAllister and Irvine (2000) examined the various benefits and issues of three multicultural teacher education models to determine how best to support teachers' cultural proficiency. The researchers suggest proficiency trainings should recognize that teachers start from "different levels of multicultural awareness," appoint professional development leaders to determine the "general level of readiness of their pre- and in-service teachers" so they can guide them toward the necessary multicultural education (McAllister & Irvine, 2000, p. 19). To this point, it is also important to remember that some teachers may actually hold outright racist attitudes.

While it is the hope that educators, and indeed all people, never hold racist attitudes or make racist remarks to children, and while most participants' comments about their perceptions of teachers' cultural competence describe incidents that demonstrate ignorance or accidental stereotyping, data from this study also reveals some alarming incidences of explicit racism. One participant described experiences with "teachers that told me I was going to hell," and implied that "I worshipped rats, grass, did ritual dances, etc." Another participant described feeling embarrassment after "one of my teachers mockingly asked if my parents spoke English." Needless to say, racism among teachers should never be tolerated, and while this experience does appear to be uncommon, it is also unacceptable; "it is imperative that educators and teacher educators fight the prejudices to which all people are exposed" (JohnBull, 2012). Given that there is so much diversity in the level of multicultural awareness, and even the presence of racism, among teachers, cultural proficiency training should address teachers' specific, existing stereotypes, misguided beliefs, or prejudices, to help decrease them.

Addressing specific biases. Many teachers may have socialization biases and Eurocentric worldviews, which must be overcome (Ponterotto, Baluch, Greig, & Rivera, 1998). Further, how teachers see themselves is integrally connected to how they understand race and bias (Hyland, 2005). Because individuals may tend to believe their own cultures are the "best of all possible worlds," even while recognizing multiculturalism and the value in others' beliefs (Pedersen, 2000), it becomes increasingly important to addressing bias. Improving cultural competence would be particularly valuable for non-Indian teachers who work with Indian American students, since improved competence enables educators to be more effective with students from cultures

other than their own (National Education Association, 2015). Additionally, in some cases, White teachers may engage deficit-thinking models when explaining achievement of students from racial or cultural out-groups (Valencia, 1997).

McAllister and Irvine (2000) advise that all teachers become more aware of their own cultures, race, and potential biases early in the intervention process, in order to improve the effectiveness and relevance of cultural proficiency training, since cultural competence requires awareness of one's own cultural identity, and attitudes about diversity (National Education Association, 2015). Proficiency training must address specific misguided beliefs head on, since a best practice in designing training would be to include explicit cultural competence instruction (McAllister & Irvine, 2000), and because it is important that teacher training recognizes and corrects stereotyping and biases (Montgomery County Public Schools, 1999). Further, teachers must account for the importance of both cultural similarities and differences simultaneously (Pedersen, 2000). Thus, in order to meet the goal of helping teachers address their own specific cultural biases (McAllister & Irvine, 2000), combat stereotypes, and better understand their students, training should focus on explicitly improving teachers' literacy related to the cultural groups they do not understand. Explicit literacy instruction may help in combat teachers' tendency to view their Asian American students as a homogenous population, thus enabling them to be more capable and effective in diverse, multicultural classrooms (Guerra & Nelson, 2007).

Considerations for developing training. Cultural competence and proficiency training tends to be most effective when conducted live (Guerra & Nelson, 2007). Although technology can be beneficial for teaching and learning cultural literacy and

proficiency, "face-to-face interaction is best," since using technology might reinforce the very "distancing and isolation that contribute to cultural misunderstandings" (Guerra & Nelson, 2007, pp. 59-60). Further, since teachers may need varying levels of support to improve culturally proficiency (McAllister & Irvine, 2000), training in cultural proficiency should be differentiated to teachers' levels of awareness, which is likely best achieved through in-person training. Additionally, McAllister and Irvine (2000) recommend having teachers engage in group-work for such trainings, since this approach tends to better promote cross-cultural growth and cultural responsiveness.

To be effective, teachers must provide instruction in a culturally responsive way, since students from different cultures may have different learning needs and preferences (Gay, 2010; Hammond, 2014). In order to do this, teachers need knowledge and understanding of students' backgrounds and cultures, and must be able to incorporate them into their curriculum and pedagogy in order to be effective (Nieto, 2013). To promote students' information processing, teachers must be taught to "respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new concepts and content" (Hammond, 2014, p. 15), and then be able to recognize students' "cultural displays of learning and meaning making" to adjust their teaching to that student (Hammond, 2014, p. 15). Training should also allow teachers to explore their understanding of culture in a group setting to "encourage risk-taking to foster cross-cultural growth," but avoid so much risk-taking that there are feelings of fear, guilt, or frustration (McAllister & Irvine, 2000, p. 20).

Teacher input for developing training. As evidenced by the exploratory interview (Appendix E provides a transcript from this interview), teachers themselves are

an excellent resource for developing training; some key insights from teachers' comments in the exploratory interview may be valuable:

- Teachers may prefer "current" training from someone "of that culture."
- Teachers may want person to come in and explain "cultural beliefs and value systems" and to provide opportunities to ask questions.
- Teachers may prefer an online module, and may see it as the more manageable or feasible, but recognize these may be harder to take seriously.
- Teachers may prefer to hear from a student from a particular culture, to hear firsthand accounts of their diverse experiences.
- Due to their many responsibilities, teachers prefer trainings that demand less time.
- Teachers may benefit from or want general cultural sensitivity training.
- Teachers may find value in learning about the "spectrum" and diversity within a cultural group, and may be able to translate or apply this thinking to other groups.
- Teachers want to know what students themselves want teachers to know, and want to be more aware of how their stereotyping impacts students' experiences.
- Teachers may admit to needing training, but might still prefer it to be optional.

Collecting more input from teaching practitioners would be a valuable component of developing a prototype for teacher training, since working with key stakeholders to develop a framework or prototype has significant value.

Teacher Recruitment Considerations

There is value in recruiting and hiring more South Asian American teachers, as well as in encouraging students to enter the teaching profession. Given that school staff,

their attitudes, perceptions, beliefs, and actions, may be an important component of creating and sustaining a multicultural "total school environment," it is necessary to promote diverse hiring practices may be a crucial component in (Banks, 2015, p. 57).

While Asian student enrollment in primary and secondary schools has doubled in every decade since 1970, the disparity between proportions of these students and Asian American teachers has increased (Rong & Preissle, 1997). In spite of a dramatically increasing population of multicultural students, most schools today are primarily staffed by White teachers (Hyland, 2005). This is particularly problematic since there is a tendency for individuals to have a preference for their own cultural values, and see them as the best of all possibilities (Pedersen, 2000). Further, teaching practices of White teachers may often serve to sustain racist ideologies when teaching Black students or other students of color (Hyland, 2005). Moreover, teachers' perceptions and evaluations of students' classroom behavior are impacted by race (Downey & Pribesh, 2004). Thus, while simply hiring more South Asian American teachers does not eradicate the existing issues (one participant shared their experience with an Indian American teacher "who would grade me harsher than other students because he expected more from me," suggesting that even South Asian American teachers are susceptible to believing stereotypes about students who share their background), it may help counteract some of the harmful effects of the existing lack of diversity among teaching staff.

Such findings suggest that diversifying the teaching population may help mitigate this effect. While improving competence may require explicit training, focusing on building diverse recruiting and hiring practices may be valuable in mitigating some of the negative effects of low cultural proficiency, and in addressing the disparity between

teacher and student populations' backgrounds. It may also be necessary to encourage South Asian American students, as well as all students from varying backgrounds, to consider the teaching profession, as part of a larger effort to maximize the pool of South Asian American teaching applicants. In order to diversify recruitment and hiring practices and promote more inclusiveness of South Asian Americans in education professions, it is necessary to encourage more young South Asian Americans to consider education as a career path. It may be necessary to harness the power of marketing in order to make education more appealing to younger audiences, rather than individuals already ready to enter the work force.

Recommendations for Further Research

Meaningful contributions to the currently limited research are a necessary first step in creating a knowledge base that might enable educators to develop training that would enable teachers to develop cultural proficiency in supporting their students. They may also be necessary for the sake of expanding the currently limited understanding of South Asian American students' experiences. Thus, further research should continue to examine these students' experiences, and especially the experiences of diverse South Asian subgroups. Researchers should also examine the life outcomes of South Asian Americans, and examine the roles of Americanization, SES, school demographics, and immigration. Additionally, there is value in considering the current and future political and social climate in the U.S., and examining students' experiences in that context. Additionally, future research into the academic and executive functioning support needs of students might examine both sets of needs together. Further research may also benefit

from examining the overall negative experiences of students in context of teachers' low cultural competence, and their connectedness to school. Finally, there is value in the development of an overall framework for understanding and supporting South Asian American students.

Examine Specific Groups

As is now being recommended by the White House Initiative on Asian American and Pacific Islanders (2015) and Secretary of Education John King (2016), future data collection on Asian Americans should be disaggregated and should account for differences in Asian sub-groups. As outlined by Harris-Kojetin (2012) in a statistical policy working paper for the White House's Office of Management and Budget, until now, the existing HHS standards for presenting data on race and ethnicity have not required further detail than categorizing Asian Americans as Asian, Native Hawaiian, or Other Pacific Islander. Going forward, efforts should be made to disaggregate data by a larger set of subcategories, including Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, and other, as well as additional categories for Native Hawaiian and Other Pacific Islanders (Harris-Kojetin, 2012). This is a crucial first step in any further research, and it is advisable that further work in this area examines the experiences of distinct Asian American subgroups.

Examine unique South Asian American subgroups. It may also be worth noting that in addition to the variability among Asian subgroups, South Asian and Indian Americans are also heterogeneous in terms of specific cultural values or norms. Because this study did not delve deeply into the distinct experiences of different subgroups within

the South Asian American umbrella, it may be valuable for future studies to examine in a way that compares their experiences. Further, it may be that South Asian American students' experiences differ based on the degree to which they are perceived as being from their cultural background, or the degree to which they feel they are perceived as American. It may also be valuable for further research to examine teachers' interactions of, and support of, students from distinct South Asian backgrounds.

Examine the role of appearance in context of colorism. It is possible that students' appearances, including skin color, facial features, and hair texture, might influence the way they are perceived by their teachers and peers. Those South Asian American students who look like they could be Caucasian, African American, or otherwise less foreign, may have different experiences than their peers who look more distinctly South Asian; alternatively, students who may not be of Indian or Asian American backgrounds but appear to be, may also have experiences worth delving into. These varied scenarios may influences teachers' perceptions of students, and consequently, students' experiences. It may be valuable to examine the role of colorism in teachers' interaction with students with differing appearances. Such considerations may be rooted in concepts of colorism, which may have a complex history in the United States with respect to South Asian Americans and South Asian immigrants. The appearance of South Asian American students may impact their experience of prejudice and discrimination, and in turn, their overall experience in school.

Examine the role of Americanization. Also of potential significance may be the experiences of Indian American students who are not raised with Indian cultural values; schools in the United States have historically "Americanized" certain diverse immigrant

populations (Banks, 2015, p. 91), suggesting the degree of connection to cultural backgrounds may be worth examining (indeed, one study participant described struggling with the experience of being "the least-Indian Indian girl" in her community). Research into this area may of particularly importance in light of a recent social psychology study suggesting that many Americans hold biases about non-White Americans (Yogeeswaran, Dasgupta, Adelman, Eccleston, & Parker, 2011). The 2011 study found that while many Americans support diversity in theory, they may dislike non-White individuals who express their ethnic identity publicly (Yogeeswaran et al., 2011), which may on impact how those non-White individuals perceive themselves, or their social status. This may have implications for whether Indian American students who embrace their ethnic identities have a more pronounced effect from teachers' belief in the model minority myth than those who do not appear to be as connected to their ethnicities. Thus, it may be worth exploring whether being perceived as South Asian leads to more pronounced effects from the model minority myth. While this particular gap in literature raises an interesting sociocultural question, it is outside of the scope of this study; future studies should examine South Asian and Indian American subgroups that may have differing experiences based on how connected to American culture they are.

Impact of school demographics. It may be valuable for future research to more closely examine the distinct experiences of students who attend schools with varied demographics. It may be valuable to examine how differing school demographic contexts impact students' overall experiences, including, but not limited to, in context of teacher cultural competence. It may also be worth examining how different demographic environments impact teachers' actual cultural competence. While intriguingly,

participants seemed to struggle with teachers' low cultural competence regardless of whether they attended a school with predominantly White, schools, minority-majority schools, and schools with high concentrations of South Asian Americans, there may be value in further examining how demographics influence experience.

One study examined the experience of an Asian American woman who was forced to explore ethnic identity issues when she moved from a predominantly White area to a higher Asian population environment (Sue & Sue, 2013). When she was in the White area, the Asian American woman was able to rationalize away incidences of prejudice, but when she was in the presence of a greater number of individuals who shared her background, instances of differential treatment became more visible and obvious to her (Sue & Sue, 2013). This may or may not reflect South Asian American students' experiences, and may warrant a deeper examination in future research.

Examine different SES groups. It may also be valuable to examine the differing experiences of South Asian Americans from different socioeconomic status (SES) groups. This may be particularly important since SES is a significant factor in academic success (Ogbu & Simons, 1998), and South Asian Americans have diverse experiences in education attainment and financial success (Rahman & Paik, 2017). As Rahman and Paik (2017) assert, occupational trends for South Asian American are bimodal, and several South Asian Americans work in lower-wage jobs. Consequently, there may be a notable portion of the South Asian American population that may have different experiences than the population that existing literature, including this study, tend to focus on.

The role of immigration. Immigration experiences may be worth exploring. The majority of South Asian Americans may come from families who immigrated to the

United States after 1965, under notably more favorable conditions than those who immigrated earlier; the later immigrants were typically more educated, wealthy, and fluent in English, and experienced fewer barriers to incorporation into society (Rahman & Paik, 2017). However, many South Asian Americans may come from families who immigrated in drastically different conditions; this subgroup has been increasing since the 1980s (Rahman & Paik, 2017). Additionally, Indian Americans, for instance show higher rates of graduate education compared to some other Asian American groups (Barringer et al., 1990, p. 30-31), and their families typically show high rates of voluntary, "selective immigration" (Barringer et al., 1990, p. 31). In contrast, some "involuntary" immigrants, such as Chinese, Hmong, and Vietnamese refugees (Ogbu & Simons, 1998, p. 165), may have relatively high numbers of students with only an elementary school education or less (Barringer et al., 1990, p. 31). This SES variation may also influence student performance in schools (Barringer et al., 1990). Some existing economic research shows that voluntary immigration and SES are significant factors in academic success (Ogbu & Simons, 1998).

Ogbu and Simons's (1998) study found that Asian American students, particularly those from immigrant families, may "trust" their teachers and education institutes more than their peers do (p. 174). The research suggests families who are voluntary immigrants tend to have a more positive outlook and a higher respect or value for education institutions than non-voluntary immigrants (Ogbu & Simons, 1998). Academic success and education level of Asian Americans can often be linked back to SES (Lee, 1994), which for Asian American families can be influenced by voluntary versus involuntary immigration into the United States (Ogbu & Simons, 1998). Some "involuntary"

immigrants, such as Southeast Asian refugees (Ogbu & Simons, 1998, p. 165), may have higher numbers of students with only an elementary school education or less (Barringer, Takeuchi, & Xenos, 1990). Meanwhile, communities that show high rates of voluntary "selective immigration" tend to perform better (Barringer, Takeuchi, & Xenos, 1990, p. 31). The impact of voluntary or involuntary immigration among specific Indian American sub-communities may warrant further exploration in future research.

Changing social context. Further research should make note of the changing social context and historical markers that may influence the student experience. The sample in this study, for instance, is a group that grew up in schools following 9/11, which may have impacted their experiences with prejudice, and may have influenced their experiences relating to students from other backgrounds. The experience of one participant, who described struggling with having an appearance that seemed to invite discrimination rooted in Islamophobia while in school, demonstrates the importance of considering changing social contexts in future research. Future studies, which may take place following the 2016 election may also impact the experiences of students; thus, researchers should make note of these historical markers in the context of further studies, and there may be value in considering the impact of these markers on their experiences.

Examining Life Outcomes

Because many participants discussed the experience of wishing that their passions outside of STEM had been nurtured, there may be great value in further research to examine the overall life outcomes of South Asian Americans. As many participants shared, they had experiences of wanting encouragement to pursue interest that they were

passionate about, especially outside of math and science fields. As another participant shared, they wished they had received mentoring about what they wanted to do. In future research, there may be value in examining both the roles of success, and overall satisfaction and happiness, as experienced by individuals, in context of opportunities that they were encouraged or discouraged from pursuing in their school careers.

Examining "Support Needs"

In further studies of Asian American students' needs, there may not be a need to differentiate between Desired General Academic Support and Desired Executive Functioning Support, and may need to measure Desired Support (a combined scale yields a Cronbach's alpha value of $\alpha = 0.85$, compared with $\alpha = 0.74$ for Desired General Academic Support, and $\alpha = 0.87$ for Desired Executive Functioning Support). Additionally, future research can treat Received General Academic Support and Received Executive Functioning Skills Support as components of a single variable called Received Support (a combined scale yields a Cronbach's alpha value of $\alpha = 0.89$, compared to $\alpha = 0.71$ for Received General Academic Support, and $\alpha = 0.87$ for Received Executive Functioning Support). Students may not necessarily distinguish between supports that help them better understand academic content and supports that enhance their executive functioning skills. Thus, in future studies, treating "support needs" as a single construct might allow future research to look at support needs in a comprehensive way (Appendix T provides a combined scale). It may be necessary, however, to first assess these proposed combined scales formally, to ensure that combining them is prudent from a research design perspective. Such an examination may require assessing the variance

influence factor, and examining for multicollinearity.

Examining "Negative Experiences"

Possibly, students' connectedness to school is closely linked to their perception of their teachers' cultural competence. Thus, it may be advisable for future research into students' overall experiences, in context of teachers' cultural competence and their connectedness to school, to use a single scale measuring overall Negative Experiences (Appendix U). This combined scale is comprised of Lack of Connectedness to School scale and the Perceptions of Teachers' Low Cultural Competence; the combined scale yields a high value for Cronbach's alpha ($\alpha = 0.89$, compared with a value of $\alpha = 0.73$ for Perceptions of Teachers' Low Cultural Competence, and a value of $\alpha = 0.88$ for Lack of Connectedness to School). Thus, this combined scale might serve as a valuable tool in continuing an examination into the overall experiences of students. In particular, this scale has application value for comparative studies examining the overall experiences of subgroups of South Asian American students. The scale could also be valuable in examining the effectiveness of a cultural proficiency intervention; the scale could be used to measure students' experiences prior to, and following, an intervention to improve teachers' cultural competence, in order to assess the effectiveness of the intervention.

Developing a Two-Pronged Framework

There is a need to develop a framework for teachers to better support South Asian American students. The multicultural ideology related to diversity in education may serve as an appropriate base for such a framework, as this moderate ideology acknowledges the influence of both ethnic culture and common national culture, respects students' ethnic

and cultural backgrounds, and is "highly consistent with the multicultural vision of society" (Banks, 2015, p. 125). A two-pronged framework could include, first, a general cultural proficiency training component, and second, a specific cultural literacy component, tailored to the group being studied.

General cultural proficiency component. The first component of the framework might build on existing best practices regarding supporting a multicultural student body. This component of the framework might build on three concepts from Banks's (2015) major multicultural education components: (1) prejudice reduction, (2) equity pedagogy, and (3) empowering school and social culture. Thus, the general cultural competence component would aim to reduce teachers' prejudiced beliefs, stereotypes, and misconceptions, improve teaching, such that it facilitates achievement and success for all student groups, and encourage teachers to develop an inclusive, multicultural environment for their students (a brief discussion of this final component is included in the Recommendations for Practice section). Existing literature on multicultural education provides guidelines for best practices; as such, this general competence component could build on existing literature.

Specific cultural proficiency component. The second component could help improve participants' cultural literacy, related to the specific subgroup being studied. The specific cultural literacy component of the framework would require explicitly teaching educators about the diverse needs of students from this background, and would include a discussion of the model minority myth and its impact on students as measured in this study. Language from participants in this research might be valuable in illustrating for educators the potential harms believing a seemingly positive stereotype. The literacy

component might also include specific education about cultural beliefs and values of South Asian American students; this might require further research. The framework's focus on maximizing cultural literacy may prove valuable for all teachers who might work with South Asian American students presently or in the future, while simultaneously providing value in teachers' overall ability to support all students.

Considerations for scaling. In order to assess the effectiveness of the framework, it may become necessary to examine the beliefs of teachers, before and after administering training. Future research should focus on developing this framework fully, and further identifying components that might make it a success. Easily digestible and distributable packets of information based on this framework could be distributed to educators nationwide. The formula of this proposed framework, which is to provide general cultural competence training, coupled with specific cultural literacy training, could be adapted to provide cultural proficiency training related to any cultural group.

Conclusion

The findings suggest students would benefit from greater support from teachers in developing academic as well as executive functioning skills, that there is a need for improving teachers' cultural competence related to their South Asian American students, and that there is value in recruiting and hiring more South Asian American educators. The findings also suggest a path for future research that may include further examination of specific subgroups, a deeper look at support needs of students, and a deeper examination of the relationship between cultural proficiency and students' overall experiences, particularly when those experiences are negative.

These findings suggest that South Asian Americans may want more support than they receive from their teachers, may benefit from more culturally competent teachers, and that there is room for improvement in their overall connectedness and experiences of school. The findings of this study may help in making the case that teachers' low cultural competence has a negative on their South Asian American students, and as such, may suggest that even when these students succeed academically or report still having an overall positive experience with school, it may be in spite of, rather than because of, their teachers; if teachers had greater cultural competence, these students, and all others, might have better experiences. The findings of this study may be valuable as a contribution to the literature, and in making the case that teachers need more proficiency training.

However, there still exists a need for even more research into the needs, experiences, perceptions, and culture of South Asian Americans, which may be valuable in the eventual development of a framework for supporting South Asian American students; this could be used in cultural proficiency training to educators. In fact, the threefold problem examined in this study may be addressed through further research: (1) the lack of literature, (2) the need to address teachers' low cultural competence, and (3) the need to mitigate any negative effects of teachers' low cultural competence on students. Further research will help improve the situation for South Asian American students, and for all students. Indeed, as education practitioners continue improving their cultural proficiency, they may be able to improve the experiences of *all* students.

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APPENDICES

APPENDIX A

Estimation of Number of Indian American K-12 Students

Of the approximately 17.3 million Asians in the United States (U.S. Census, 2010), at least 2.6 million are enrolled in K-12 public school (National Center for Education Statistics, 2015c), which constitutes 15% of the total Asian American population. Based on this percentage, it is plausible that approximately 15% of the total population of Indian Americans is also enrolled in K-12 public schools. The total population of Indians in Maryland as of 2010 was 79,051 (U.S. Census, 2010). Assuming 15% of this population is enrolled in K-12, it can be estimated that there were at least 11,868 Indian Americans enrolled in 2010. The same estimation can be done for the national total population of Indians, which is at least 3.2 million (U.S. Census, 2010). Assuming 15% are enrolled in K-12 public schools, it can be estimated that there are at least 570,000 Indian American students enrolled. Additionally is known that Asian American students make up at least 5% of the total population of students enrolled in public elementary and secondary schools, and this number is projected to increase to 6% by 2024; this represents a total enrollment of approximately 3 million Asian students (National Center for Education Statistics, 2015c). This also indicates that the population of Indian American students is projected to grow.

APPENDIX B

Recruitment Letter for Exploratory Study

Seeking Middle or High School Teachers for a Research Study

My name is Punita Chhabra Rice, and I am a student in the Ed.D. program at Johns Hopkins University. I am reaching out to you to request assistance in recruiting middle and high school teachers, who teach or interact with Indian American students, to participate in an online survey.

The purpose of this research study is to determine teachers' self-reported levels of confidence and preparedness in supporting their Indian American students, as well as in providing students with self-advocacy skills support or instruction. For this study, Indian American individuals are defined as originating from the country of India. Your participation would be highly valued.

Your participation will contribute to the understanding of how confident and prepared teachers feel in supporting their Indian American students, as well as in providing students with self-advocacy skills or instruction.

There will be complete confidentiality regarding your responses, including from the researcher herself. At no time will your name be used or any identifying information revealed. There are no anticipated risks or discomforts related to this research. Your participation in this study is completely voluntary and you may withdraw at any time during the survey. The survey itself will only be available for participation until November 2015. The results of this study will be reported upon conclusion of my dissertation.

This study is being conducted under the supervision of Professor Christine Eith, Ph.D. who can be contacted at Johns Hopkins University, 2800 N. Charles St Baltimore MD, 21218, (410) 516-0640, or via email at [email address] This research has been given approval by the IRB at Johns Hopkins University School of Education. If you have any questions about the research, or complications with accessing the online survey, please contact me at [contact information].

If you elect to participate in the survey, there is a consent form on the first page. Please click the link to begin the survey. [Link]
Kindly,
Punita Chhabra Rice, M.A.T.
Doctoral Student
Entrepreneurial Leadership in Education Ed.D. Program
Johns Hopkins University

APPENDIX C

Exploratory Study Survey Participant Consent Form

Teacher Self-Reported Levels of Confidence and Preparedness in Supporting Students

Please read the consent form below before continuing.
* Required

CONSENT FORM

PURPOSE OF RESEARCH STUDY:
The purpose of this research study is to determine teachers' self-reported levels of confidence and preparedness in supporting their Indian American students, as well as in providing students with self-advocacy skills support or instruction. Cultural proficiency is "the knowledge, skills, and attitudes and beliefs that enable a teacher to work well with, respond effectively to, and be supportive of people in cross-cultural settings."

PROCEDURES:
The study has a single component, consisting of an online survey about your cultural beliefs related to education. As a participant, you are asked to do your best to think about each answer and respond honestly, and with care. The survey should take less than ten minutes if your time.

RISKS/DISCOMFORTS:
There are no anticipated risks to participants.

BENEFITS:
Potential benefits of this particular study include: (1) an understanding of how confident teachers are in their abilities to support their Indian American students, and students from other backgrounds, (2) an understanding of how teachers perceive their own level of preparedness for supporting Indian American students, and students from other backgrounds, (3) a deeper understanding of teachers' levels of confidence and preparedness in providing students with self-advocacy instruction, and (4) a deeper understanding of what teachers may need to know in order to feel higher levels of comfort or preparedness in supporting these students. Your contribution is valuable to this research.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:
Your participation in this study is entirely voluntary. You choose whether to participate. If you decide not to participate, there are no penalties, and neither you nor your child will lose any benefits to which you would otherwise be entitled. You can stop participation in the study at any time, without any penalty or loss of benefits.

CONFIDENTIALITY:
This study is by nature, anonymous. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board. No identifiable information will be included in any reports of the research published. Survey data completed electronically will be collected via a password protected Google Forms account that belongs to Punita Chhabra Rice. No individual data from this study will ever be published.

COMPENSATION:
You will not receive any payment or other compensation for participating in this study.
IF YOU HAVE QUESTIONS OR CONCERNS:
You can ask questions about this research study at any time by contacting Punita Chhabra Rice via email or phone: punita@jhu.edu or (240) 863-2374. If you have questions about your rights as a research participant, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

Anonymous Digital Signature
Selecting "agree" below serves as your anonymous, digital signature. If you select agree below, it means you understand the information in this consent form. Selecting agree also means that you agree to participate in the study. By selecting agree, you and your child have not waived any legal rights your child otherwise would have as a participant in a research study.

If you wish to participate, please select "agree" below. If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button, or by exiting this page.*

[Agree] [Disagree]

APPENDIX D

Exploratory Study Survey Instrument

Teacher Self-Reported Levels of Confidence and Preparedness in Supporting Students

In order to continue you must respond yes to the question below.
Are you a middle or high school teacher?*
[Yes] [No]

In order to continue you must respond yes to the question below.
In your work, do you interact with at least one student who is Indian (originating from the country of India in South Asia) or Indian American?*
[Yes] [No]

Please read the answer choices carefully before making your selection.
What cultural or ethnic group(s) do you most identify with?*
Try to consider the one group you most identify with.

- ☐ American
- ☐ Black/African-American
- ☐ Hispanic/Latin American
- ☐ Asian/Asian American
- ☐ Indian/Indian American
- ☐ Indigenous American/Native American/First Nations
- ☐ Other – I most strongly identify with a cultural or ethnic group that is not listed above
- ☐ None – I do not strongly identify with any cultural or ethnic group(s) and therefore cannot select one of the above
- ☐ Multiple – I most strongly identify with two or more cultural or ethnic groups and therefore cannot select one of the above

Levels of Confidence and Preparedness in Supporting Students

These questions are about your levels of confidence and preparedness in supporting students from various backgrounds and cultures. Please do your best to be as honest as possible. In the questions with a 1-7 scale, if you truly do not know or are neutral, please choose the middle score.

1. **Overall, how confident are you in your skills in supporting the needs of most of your students?*** For this question, think about the majority of your students.
   [Not at all comfortable] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Extremely comfortable]

2. **How confident are you in your ability to support the particular needs of your Black/African-American students?*** For this question, consider how students' culture might influence behaviors or needs in class.
   [Not at all comfortable] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Extremely comfortable]

3. **How confident are you in your ability to support the particular needs of your White/Caucasian students?*** For this question, consider how students' culture might influence behaviors or needs in class.
   [Not at all comfortable] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Extremely comfortable]

4. **How confident are you in your ability to support the particular needs of your Hispanic students?*** For this question, consider how students' culture might influence behaviors or needs in class.
   [Not at all comfortable] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Extremely comfortable]

5. **How confident are you in your ability to support the particular needs of your Asian/Asian American students?*** For this question, consider how students' culture might influence behaviors or needs in class.
   [Not at all comfortable] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Extremely comfortable]

6. **How confident are you in your ability to support the particular needs of your Indian/Indian-American students?*** For this question, consider how students' culture might influence behaviors or needs in class.
   [Not at all comfortable] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Extremely comfortable]

7. **Reflect on your cultural proficiency. How well do you understand the culture(s) and cultural norms of your Asian students (any Asian culture)?***
   [Not at all] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Extremely well]

8. **Reflect on your cultural proficiency. How well do you understand the culture(s) and cultural norms of your Indian students (any Asian culture)?***
   [Not at all] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Extremely well]

9. **Reflect on your cultural proficiency. Which of these cultural groups do you think you could benefit from learning more about?*** If you do not think you or your professional practice would benefit from learning more about any of these groups, select "none"
   - ☐ None
   - ☐ Black/African-American
   - ☐ Black European students
   - ☐ Hispanic/Latin-American students
   - ☐ Other cultural group (not listed)
   - ☐ White European students
   - ☐ Asian/Asian American students
   - ☐ East African students
   - ☐ White/Caucasian American students
   - ☐ Indian/Indian-American students
   - ☐ West African students

10. **Reflect on your cultural proficiency. Do you think you would be able to better support Indian/Indian-American students if you understood their culture better?***
    [Yes] [No] [Maybe]

11. **Reflect on your cultural proficiency. Do you think you would be able to better support Indian/Indian-American students if you understood their unique needs better?***
    [Yes] [No] [Maybe]

12. **In your opinion, how much support do your Black/African-American students tend to need from you, compared with students from other cultural groups?***
    [Significantly less than other groups] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Significantly more than other groups]

13. **In your opinion, how much support do your White/Caucasian students tend to need from you, compared with students from other cultural groups?***
    [Significantly less than other groups] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Significantly more than other groups]

14. **In your opinion, how much support do your Hispanic/Latin-American students tend to need from you, compared with students from other cultural groups?***
    [Significantly less than other groups] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Significantly more than other groups]

15. **In your opinion, how much support do your Asian/Asian American students tend to need from you, compared with students from other cultural groups?***
    [Significantly less than other groups] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Significantly more than other groups]

16. **In your opinion, how much support do your Indian/Indian-American students tend to need from you, compared with students from other cultural groups?***
    [Significantly less than other groups] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Significantly more than other groups]

Levels of Confidence and Preparedness in Providing Self-Advocacy Skills Support and Instruction

This last set of questions will ask about your levels of confidence and preparedness in providing students with support and instruction in self-advocacy skills. Please do your best to be as honest as possible. In the questions with a 1-7 scale, if you truly do not know or are neutral, please choose the middle score.

17. **In your opinion, how important is it for students to have self-advocacy skills?***
    [Not at all important] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Extremely important]

18. **How confident or prepared are you in your ability to teach students how to self-advocate?***
    [Not at all confident/prepared] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Extremely confident/prepared]

19. **How often do you think you provide your students instruction or support in self-advocacy skills?***
    [Not at all] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Very often]

20. **How approving would you be if a student self-advocated by respectfully expressing disagreement with you regarding what he/she perceived to be an unfair or undeserved grade?***
    [Not at all approving] 1 – 2 – 3 – 4 – 5 – 6 – 7 [Extremely approving]

21. **Do you believe teachers have a duty to teach or support all students self-advocacy skills?***
    [Yes] [No] [Maybe]

22. **Do you believe teachers have a particular duty to teach or support students in the special education program in self-advocacy skills?***
    [Yes] [No] [Maybe]

Your responses have been recorded anonymously. Thank you for your participation!

You can ask questions about this research study at any time during the study by contacting the researcher, Punita Chhabra Rice, via email or phone: punita@jhu.edu or (240) 863-2374.

APPENDIX E

Teacher Interview Transcript

Table E1

Teacher Interviews

Speaker	Comment
Researcher	[Omitted: Greeted participants, gave a brief overview of the procedure]
	Do you think there's value in providing Cultural Competence training to teachers in this area? If so, what do you think might be a good approach to delivering the training?
Teacher A*	The school district should fund a trip to experience the cultures; maybe you can't send everybody, but really maybe ambassadors, swap teachers, or go observe and learn from their teachers for a quarter or a semester. It's ideal, but it isn't realistic. If there were to be Professional Development, I really want someone of that culture teaching it. I'm offended by White people teaching me how to teach Black kids. That was like my first year: White teacher telling me how to get Black kids to read.
Teacher B*	Bring in food and music…
Teacher C*	I think that even just having a bit… just having someone to come in and explain sort of cultural beliefs, and value systems, particularly if there's something unique to the kinds of families that choose to come here from South Asia, or from this school, China and Japan and Korea -- I think there's a lot that can go a long way to help teachers be open and understand the students in the room.
Researcher	What might some kind of Professional Development in cultural competence training for Indian and/or Asian cultures look like?
Teacher C	I think you could do it in small pieces, to do a staff, or maybe team – I don't know. A 10-minute culture information session. "This month or week we're going to learn about X; or see a video, or even have students come, and tell about a holiday, a belief system, or a story of "why my family came here," or why these students are in this room we teach.

Speaker	Comment
	There would be resistance, because people are busy. Everybody wants to know things, but I don't know. There's always reasons on some level not to do it.
	I think, too, there's a comfort in this building for the kids to throw around racist Asian stereotypes. And I don't know that the staff is equipped to handle it. They laugh it off.
	I lay it down, and I say that I find it offensive… it diminishes the amount of work the students do. It makes people that fit that stereotype feel very awkward. We don't know how to deal with that. I think teachers participate, because it seems like it's funny. But it's not funny. There's no leadership to tell us how to address it, or whether to. Maybe some cultural sensitivity might be valuable. Give a minute to give teachers to think about things that are said, and what the effects are of the things that are said.
Researcher	So teachers need to improve their cultural sensitivity?
Teacher C	If you could read some of these essays; some of these Asian students, it isn't good for them. **Asian kids who are adopted from China and raised by a gay white family. They don't feel like they fit whatever's being thrown about.**
Researcher	So teachers should overcome their stereotypes about Asian students?
Teacher C	None of the kids fit the [expletive omitted] stereotype. It's damaging to the kids who obviously don't, **but to feel "this is how I seemed, but nobody knew who I was on the inside" -- it's damaging to everyone to think it's okay to have some particular belief about a group.**
Researcher	And why is this even a teacher's responsibility, to become competent?
Teacher A	Because our job is to reach all kids!
Teacher C	Because we're here to address the whole child, and every kid that's sitting in the room… and so, not that you always make accommodations based on your understanding of the culture, but you should have some background and some understanding and so you can understand where they're coming from, and know when not to take that into account.
Teacher B	Also, the easiest and cheapest way would be an online module. I don't think those are great, but it's the cheapest, and easier to get done in terms of getting everybody.

Speaker	Comment
Researcher	Is that the ideal outcome? To get everybody to do it?
Teacher A	I think it should be optional. There should be some type of training about all cultures. There should be an online system to keep it current. I went to Howard and was brainwashed. It's an HBCU. I'm going to have to fight to prove my worth because I'm Black. Coming here, I was just with Black and Hispanic students. It's not that I always know how to relate to White kids, because they're very different from the way I grew up. A lot of them feel they can say whatever they want to "threaten me with their parents"
Teacher B	My kids don't do that.
Teacher A	Maybe it's not a race thing maybe it's a rich thing. It shouldn't just be how to deal with Indian – it should be all populations. Perhaps this course would help me to stop stereotyping. Instead of learning about close reading strategies, maybe they should ask teachers to select the three areas of biggest need and concern, and then complete a professional development based on that. Maybe not even give homework, but you have to show something at the end. So say I have this one student I have to learn to support. For example, I don't want to have to take a training on how to teach magnet kids if I don't teach them. Maybe it's tied to your SLO or whatever.
Teacher B	Maybe it's a component of more of a general cultural sensitivity training. Maybe you have 1-5 Indian kids this year, but it's still good to learn.
Teacher A	The county sometimes, and businesses in general -- will pull in outside people, and they leave with their check and go back to where they came from. But teachers can be a huge resource. You have people like you, and you can pull some other Indian teachers, who put together something that can be shared with any teacher about your culture. **Plus your experience might be different from another Indian student's experience**, which might be helpful to some teachers' experiences.
Researcher	There is certainly the idea out there that because we have so many greater, more pressing issues in education, this might not be at the top of a teacher's list. If time and money were not limited resources, this wouldn't matter -- but they are. So what might you say if a teacher said "I have bigger problems?"
Teacher D*	Maybe it's a kill two birds thing. Maybe when you learn about Indian kids and the spectrum from which they come, you can apply that to what you learn about Hispanic kids. There's a huge spectrum for any other type of students as well… **what the hell do we know about Indian students? Not much.**

Speaker	Comment
Researcher	What might be the downside?
Teacher B	I might think "he's fine, but I could take him deeper on that or I could pay attention." But if I learned more, then I might think differently: "Maybe I'm wrong, and **maybe he's just quiet and being good, and I'm ignoring him because I think he's smart."**
Teacher A	And maybe if I'm going to ignore him based on grades, then you get to know your struggling kids. But that kid who sits in the corner you just look at him and say "oh you're so smart… and then when you find him failing stuff, you wonder are you adopted?"
Teacher B	Or **maybe he's doing well, but he could benefit from something you have**, but he's not because… status quo.
Teacher A	It's like PBIS… we pay attention to [rewarding] the bad kids [for positive behaviors]… but what about the kids who do right all the time? The kids who don't pass anything is where we put all our time and energy but the others, we're like great, glad you showed up today.
Teacher B	With these kids, **there's a danger. A kid who needs support, you won't notice until he's really struggling.**
Teacher A	**Until he's dug a hole for himself… and you gave him the shovel.**
Researcher	What would you want if you got to design a Professional Development?
Teacher D	I want a real life Indian telling me about the array of Indian cultures, and how to be sensitive to it, and about the languages, and people don't speak the same dialects, and I'd like to know about the caste system. And you know, I want it from a real live Indian. "Dot not feather," just to clarify.
Teacher A	I want food. Indian food, taste the culture. I'm kidding. In addition to having a real life Indian lead it, I think it would be very beneficial to look at the school data, and have your Indian students come in and share. **And don't just pick all the ones who are high [achievers]. One that's magnet, one that's high but not magnet, one that's a musician, one that's an athlete, one that's in inclusion, and ask them about "what works for you," "what are your best educational experiences, worst experiences," and "are teachers' expectations of you different, and how so?" or "what do you notice about your peers that look like you?" and "what do you wish your teachers know about you when you walk into a room?"** But they should bring food from Mom or Dad. And Lamb Vindaloo.

Speaker	Comment
Teacher B	I like what she [Teacher A] said.
Teacher D	The Indian Pakistani relationship; aren't they just the same? **It might be helpful to learn about that relationship, because a lot of people don't know anything about them. People don't understand Sikh culture.**
Researcher	I'm Sikh!
Teacher D	**See, and I thought all Sikhs had the last name Singh!**
Researcher	Anything else you would add to a Professional Development?
Teacher B	Online makes it more feasible.
Teacher A	Yeah, but it's hard to take online trainings seriously.
Teacher D	I like having a person there to ask questions.
Researcher	Anything else you'd like me to know?
Teacher A	Yeah. **I didn't assume this one Indian kid would be a model student because he was in an inclusion class. It's bad because I'm so happy when he gets something right. And normally around Indian kids, it's like "your people" are usually good at math. So my expectations are only lower because he's in my inclusion class.** When he *is* the bright shining star, even though his behavior is obnoxious, and sometimes uses an Indian accent to be funny, then Woo-hoo, it's like "you're a brown Asian today." Meaning, you fit the stereotype today.
Teacher D	**I had a kid named [very common Indian name] in my 12-kid reading class. I was like what the hell are you doing in my reading… and he was pretty damn low.** So I would benefit from some sort of Professional Development.
Teacher C	Free trips to Asia for all teachers! Also – people need more cultural awareness, because **if a Chinese kid says "I got a B, but it was my best effort, so I'm okay with it," why shouldn't that be okay? Why shouldn't that be okay for any kid? It's not okay because he's Chinese?**
Researcher	Thank you all for participating in this interview! [Omitted: Wrap-up of conversation, thanking participants].

Note. Bold text indicates a comment that supports the negative impact of low cultural competence on students.
*Names have been omitted in this work to protect anonymity of participants.

APPENDIX F

Survey Instrument First Draft

Survey Items Related to Academic Support

Desired General Academic Support Needs

1. When learning something new or complex, it would have been beneficial to me if my teachers periodically stopped to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.

2. When preparing for a quiz or test, it would have been beneficial to me if my teachers provided me with additional opportunities to review what I learned.

Received General Academic Support Needs

3. When learning something new or complex, my teachers periodically stopped to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.

5. When preparing for a quiz or test, my teachers provided me with additional opportunities to review what I learned.

6. I could have benefitted from more general academic support than I received from my K-12 teachers.

Desired Executive Functioning Academic Support Needs

7. When receiving lengthy instructions for an assignment, it would have been beneficial to me if my teachers gave me the instructions in chunks.

8. When working on in-class assignments, it would have been beneficial to me if my teachers periodically checked on my progress to help me stay on track.

9. It would have been beneficial to me if my teachers reminded me to write down assignments and/or due dates.

10. It would have been beneficial to me if my teachers helped me with my time management skills.

11. It would have been beneficial to me if my teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).

Received Executive Functioning Support Needs

12. When receiving lengthy instructions for an assignment, my teachers gave me the instructions in chunks.

13. When working on in-class assignments, my teachers periodically checked on my progress to help me stay on track.

14. My teachers reminded me to write down assignments and/or due dates.

15. My teachers helped me with my time management skills.

16. My teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).

17. I could have benefitted from more support in building my time management and organizational skills than I received from my K-12 teachers.

Survey Items Related to Cultural Competence

Perceptions of Teachers' Cultural Competence

18. My K-12 teachers made assumptions about me based on my cultural background.

19. As compared with students from other cultures, my K-12 teachers knew little about my cultural heritage.

20. My K-12 teachers tended to group Indian American students in with all Asian Americans.

21. As compared with Black, White, and/or Hispanic students, my K-12 teachers tended to assume I was particularly smart.

Student Experiences

22. Compared to my Black, White, and Hispanic peers, I received less academic support.

23. Compared to my Black, White, and Hispanic peers, I received less help developing my time management and organizational skills.

24. My K-12 teachers did not really understand me as a person.

25. Compared to my peers from other cultural groups, I felt less connected to my school's culture.

26. In my school environment, I was very aware of being from my cultural background.

Constructed Response Questions

1. Could teachers have better supported you or your academic needs better? How?
2. What did your teachers believe about you, your cultural identity, and your background? Did they understand you?

3. What was your overall experience like as a student?

APPENDIX G

Supporting Research for Survey Items in First Draft

Table G1

Research for Items about General Academic Support Needs

Survey Items	Supporting Research
1. When learning something new or complex, it would have been beneficial to me if my teachers periodically stopped, to make sure I understood what was being taught, before continuing with instruction. 2. When learning something new or complex, my teachers periodically stopped to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	Questions 1-2: When appropriate, a best teaching practice to provide support involves checking for students' understanding, and prompting students to determine their next step as a means to checking for understanding (Jones, Jones, & Jones, 2007). This practice would also be particularly helpful in supporting English language learners (Scarcella & Oxford, 1992). Additionally, teachers should watch students' faces for indication of high cognitive load in order to help any students who might be having difficulty grasping a concept (Jones, Jones, & Jones, 2007).
3. When preparing for a quiz or test, it would have been beneficial to me if my teachers provided me with additional opportunities to review what I learned. 4. When preparing for a quiz or test, my teachers provided me with additional opportunities to review what I learned.	Questions 3-4: Teachers should offer students opportunities to review and prepare for tests (Jones, Jones, & Jones, 2007), and should help students learn to develop and follow study plans (Bakunas & Holley, 2004).
5. I could have benefitted from more general academic support than I received from my K-12 teachers.	Because teachers may believe the model minority myth, hold high expectations for their Asian American students (Kao, 1995; Lee, 2015; Sun, 1998), and believe Asian students are "more academically competent and more emotionally stable" than others (Wong, 1980, p. 241), plausibly, this leads them to provide these students with less support than their peers. For those Asian American students who do not fit the model minority stereotype (Li, 2005; Wong, 1980; Yang, 2004), responses to these questions may be of particular significance.

Table G2

Research for Items about Executive Functioning Support Needs

Survey Items	Supporting Research
6. When receiving lengthy instructions for an assignment, it would have been beneficial to me if my teachers gave me the instructions in chunks. 7. When receiving lengthy instructions for an assignment, my teachers gave me the instructions in chunks.	Combining information in a meaningful fashion, also called chunking, can increase the amount of information working memory can process (Schunk, 2008), and is a recommended scaffolding strategy for supporting students (Jones, Jones, & Jones, 2007).
8. When working on in-class assignments, it would have been beneficial to me if my teachers periodically checked on my progress to help me stay on track. 9. When working on in-class assignments, my teachers periodically checked on my progress to help me stay on track.	Questions 7-8: Monitoring student progress and checking for accuracy is a helpful teacher behavior, which supports executive functioning skills development (Boller, 2008).
10. It would have been beneficial to me if my teachers reminded me to write down assignments and/or due dates. 11. My teachers reminded me to write down assignments and/or due dates.	Questions 10-11: It is a best practice for teachers to support students in recording assignments and due dates in their assignment books (Bakunas & Holley, 2004)
12. It would have been beneficial to me if my teachers helped me with my time management skills. 13. My teachers helped me with my time management skills.	Questions 12-13: Supporting students in building their organization behaviors such as time management is a recommended teaching practice (Bakunas & Holley, 2004) that supports students' developmental progress (Boller, 2008).
14. It would have been beneficial to me if my teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device). 15. My teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device). 16. I could have benefitted from more support in building my time management and organizational skills than I received from my K-12 teachers.	Questions 15-17: Helping students build skills in organizing their schoolwork and supplies is a form of organization support teachers should provide (Bakunas & Holley, 2004), but teachers may see Asian students as emotionally stable and competent (Wong, 1980), and may give them less support in these skills, which is problematic, since while these skills begin developing when students are middle-school age, they do not mature until young adulthood (Boller, 2008). Thus, all secondary-school students need support in building developmental learning (Boller, 2008).

Table G3

Research for Items about Perceptions of Teacher Cultural Competence

Survey Items	Supporting Research
17. My K-12 teachers made assumptions about me based on my cultural background.	Teachers may hold Asian American students to the model minority myth (Wong, 1980), even when it does not fit (Li, 2005; Yang, 2004). Further, interviews from the exploratory study suggest teachers do this.
18. As compared with students from other cultures, my K-12 teachers knew little about my cultural heritage.	Existing literature suggests teachers do not have high cultural competence related to various Asian cultures (Chang & Sue, 2003), which indicates they do not know much about Indian American students' culture, and needs, especially as compared to other groups. Culturally responsive instruction involves "using the cultural characteristics, experiences and perspectives of ethnically diverse students as conduits for teaching more effectively" (Gay, 2010, p. 106); thus, when cultural competence is absent, it may negatively impact teachers' ability to provide culturally responsive instruction, making it important to determine whether students felt their teachers understood their cultures. This is particularly true because students need culturally responsive teaching and support in order to reach maximum potential (Hammond, 2014). Additionally, interviews from the exploratory study suggest teachers have little cultural awareness of Indian American and South Asian American students' cultures.
19. My K-12 teachers tended to group Indian American students in with all Asian Americans.	Existing research treats all Asian American students as a single group, without variation (Blair & Qian, 1998; Lee, 1994; Littlewood, 2000; Ogbu, 1987; Yang, 2004), suggesting teachers may also tend to do this, which may impact their competency in understanding Indian American culture.
20. As compared with Black, White, and/or Hispanic students, my K-12 teachers tended to assume I was particularly smart.	Literature indicates teachers tend to believe the model minority myth (Chang & Sue, 2003; Kao, 1995; Lee, 2015; Sun, 1998; Yang, 2004), and that Asian American students are "more academically competent and more emotionally stable" than others (Wong, 1980, p. 241). Additionally, interviews from the exploratory study suggest teachers may do this.

Table G4

Research for Items about Students' Experiences

Survey Items	Supporting Research
21. Compared to my Black, White, and Hispanic peers, I received less academic support.	Cultural competence plays a large role in culturally responsive teaching, builds meaningful teacher-student relationships (Hammond, 2014).
22. Compared to my Black, White, and Hispanic peers, I received less help developing my time management and organizational skills.	Given that teachers tend overestimate the executive functioning skills of all students (Boller, 2008), and because they may tend to see Asian students as a model minority (Wong, 1980), they may be more likely to overestimate the executive functioning skills of their Indian American students.
23. My K-12 teachers did not really understand me as a person.	Getting to know students personally is a factor influencing student experience and motivation (Adams & Pierce, 2004). Effective teachers build positive relationships with their students (Adams & Pierce, 2004). Such relationships tend to improve students' engagement and success (Klem & Connell, 2004), their sense of connectedness to school (McNeely & Falci, 2004), and their self-esteem and sense of importance (Adams & Pierce, 2004).
24. Compared to my peers from other cultural groups, I felt less connected to my school's culture.	Asian Americans may perceive isolation from other cultural groups (O'Brien, 2008). Further, the perception of Asian Americans as a model minority "promotes interracial tension between Asian Americans and other groups," (Lee, 2015, p. 2), which can reasonably be thought to harm students' connectedness to their school communities.
25. In my school environment, I was very aware of being from my cultural background.	Asian Americans face bias and discrimination, and these experiences may often influence their identities (O'Brien, 2008), thus indicating that they may feel their cultural identity is very visible and thus salient to others.

Table G5

Research for Items about Students' Experiences

Survey Items	Supporting Research
1. Could teachers have better supported you or your academic needs better? How?	Because teachers may believe the model minority myth, hold high expectations for their Asian American students (Kao, 1995; Lee, 2015; Sun, 1998), and believe Asian students are "more academically competent and more emotionally stable" than others (Wong, 1980, p. 241), it is reasonable that this leads them to provide these students with less support than their peers. For those Asian American students who do not fit the model minority stereotype (Li, 2005; Wong, 1980; Yang, 2004), responses to these questions may be of particular significance. Further, helping students build their skills in organizing their schoolwork and supplies is a form of organization support teachers should provide students (Bakunas & Holley, 2004). Additionally, Teachers may tend to see their Asian students as emotionally stable and competent (Wong, 1980), and may consequently provide them with less support in these sorts of skills. This is problematic, because while executive functioning skills begin developing when students are middle-school age, they do not mature until young adulthood (Boller, 2008). Consequently, all secondary-school aged students need teacher support in building these skills for their developmental learning (Boller, 2008), suggesting teachers must provide support in these skills to all students. However, teachers tend overestimate all students' executive functioning skills (Boller, 2008).
2. What did your teachers believe about you, your cultural identity, and your background? Did they understand you?	Getting to know students personally is a factor influencing student experience and motivation (Adams & Pierce, 2004). Effective teachers build positive relationships with their students (Adams & Pierce, 2004). Such relationships tend to improve students' engagement and success (Klem & Connell, 2004), their sense of connectedness to school (McNeely & Falci, 2004), and their self-esteem and sense of importance (Adams & Pierce, 2004). However, teachers may hold stereotypical beliefs about their Asian and Indian American students. which may inhibit their ability to make a strong personal connection with them or understand them.
3. What was your overall experience like as a student?	Asian Americans may perceive isolation from other cultural groups (O'Brien, 2008), which may impact their overall experience as students. That he perception of Asian Americans as a model minority "promotes interracial tension between Asian Americans and other groups," (Lee, 2015, p. 2) may also impact these students' connectedness to their school communities and overall experience. This question seeks to examine how students would evaluate or describe their experiences broadly.

APPENDIX H

Original Likert Scales Prior to Two-Stage Sorting

Table H1

Desired General Academic Support Needs – Modified Likert Scale

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
When learning something new or complex, it would have been beneficial to me if my teachers periodically stopped, to make sure I understood what was being taught, before continuing with instruction.	SD	D	A	SA
When preparing for a quiz or test, it would have been beneficial to me if my teachers provided me with additional opportunities to review what I learned.	SD	D	A	SA

Table H2

Received General Academic Support Needs – Modified Likert Scale

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
When learning something new or complex, my teachers periodically stopped to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	SD	D	A	SA
When preparing for a quiz or test, my teachers provided me with additional opportunities to review what I learned.	SD	D	A	SA
I could have benefitted from more general academic support than I received from my K-12 teachers.	SD	D	A	SA

Table H3

Desired Executive Functioning Academic Support Needs – Likert Scale

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
When receiving lengthy instructions for an assignment, it would have been beneficial to me if my teachers gave me the instructions in chunks.	SD	D	A	SA
When working on in-class assignments, it would have been beneficial to me if my teachers checked on my progress to help me stay on track.	SD	D	A	SA
It would have been beneficial to me if my teachers reminded me to write down assignments and/or due dates.	SD	D	A	SA
It would have been beneficial to me if my teachers helped me with my time management skills.	SD	D	A	SA
It would have been beneficial to me if my teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).	SD	D	A	SA

Table H4

Received Executive Functioning Academic Support Needs – Likert Scale

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
When receiving lengthy instructions for an assignment, my teachers gave me the instructions in chunks.	SD	D	A	SA
When working on in-class assignments, my teachers periodically checked on my progress to help me stay on track.	SD	D	A	SA
My teachers reminded me to write down assignments and/or due dates.	SD	D	A	SA
My teachers helped me with my time management skills.	SD	D	A	SA
My teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).	SD	D	A	SA
I could have benefitted from more support in building my time management and organizational skills than I received from my K-12 teachers.	SD	D	A	SA

Table H5

Perceptions of Teachers' Cultural Competence/Student Experiences

Survey Item	Strongly Agree	Agree	Disagree	Strongly Disagree
My K-12 teachers made assumptions about me based on my cultural background.	SA	A	D	SD
As compared with students from other cultures, my K-12 teachers knew little about my cultural heritage.	SA	A	D	SD
My K-12 teachers tended to group Indian American students in with all Asian Americans.	SA	A	D	SD
As compared with Black, White, and/or Hispanic students, my K-12 teachers tended to assume I was particularly smart.	SA	A	D	SD
Compared to my Black, White, and Hispanic peers, I received less academic support.	SA	A	D	SD
Compared to my Black, White, and Hispanic peers, I received less help developing my time management and organizational skills.	SA	A	D	SD
My K-12 teachers did not really understand me as a person.	SA	A	D	SD
Compared to my peers from other cultural groups, I felt less connected to my school's culture.	SA	A	D	SD
In my school environment, I was very aware of being from my cultural background.	SA	A	D	SD

APPENDIX I

Operationalized Constructs for Two-Stage Sorting Procedure

Table I1

Operationalized Constructs for Two-Stage Sorting Procedure

Construct	Abbreviation	Definition
General Academic Support (Desired / Received)	GA	In the first stage, participants need only identify questions as fitting the broad "General Academic Support" construct. The second stage will provide subcategories: • Desire for general academic support as reported by participants (DGA) • Received general academic support as reported by participants (RGA)
Executive Functioning Support (Desired / Received)	DEF	In the first stage, participants need only identify questions as fitting the broad "Executive Functioning Support" construct. The second stage will provide subcategories: • Desire for support in executive functioning skills as reported by participants (DEF • Received support in executive functioning skills as reported by participants (REF)
Perception of Teachers' Cultural Low Competence	PTC	Perception of teachers' low cultural competence
Students' Negative Experiences and/or Lack of Connectedness to School	SE	South Asian Americans' experiences as students, including negative experiences, and/or lack of connectedness to school

Note. Adapted from "Verifying survey items for Construct Validity: A two-stage Sorting Procedure for Questionnaire Design in Information Behavior Research," by N. K. Agarwal, 2011. *Proceedings of the American Society for Information Science and Technology, 48*(1), p. 3.

APPENDIX J

Results of Unstructured Sorting Exercise

Table J1

Results of Unstructured Sorting Exercise

Target Category	Actual Judge-Assigned Category						
	GA (combined)	EF (combined)	PTC	SE	Other	Combined Total	Hit Rate (%)
DGA	4					4	100.0%
RGA	6					6	100.0%
DEF	2	5				10	80.0%
REF	1	11				12	91.7%
PTC			8			8	100.0%
SE		1	9			10	0.0%
AVERAGE							78.6%

Note. The combined totals are based on two judges' responses. Table adapted from "Verifying survey items for Construct Validity: A two-stage Sorting Procedure for Questionnaire Design in Information Behavior Research," by N. K. Agarwal, 2011. *Proceedings of the American Society for Information Science and Technology, 48*(1), p. 4.

Table J2

Item Changes Following Unstructured Sorting Exercise

Construct prior to unstructured sorting	Construct following unstructured sorting	Item prior to unstructured sorting	Item following unstructured sorting	Explanation of Change
Perceptions of Teacher Cultural Competence	Perceptions	Items pertaining to students' perceptions of teachers' cultural competence	Combined "Perceptions of Teacher Cultural Competence" and "Student Experiences"	Items pertaining to students' perceptions of teachers' cultural competence, and items pertaining to students' experiences may be aligned. Further, they may both be reflective of students' overall perceptions, including perceptions of others' beliefs.
Student Experiences	Perceptions	Items pertaining to Indian American and South Asian Americans' experiences as students	Combine student experiences with perceptions of teachers' cultural competence to create a construct called "Perceptions"	Informed by feedback from judges in stage 1. Judges indicated that student experiences seem linked to perceptions of teacher competence. Items pertaining to students' perceptions of teachers' cultural competence, and items pertaining to students' experiences may be aligned. Further, they may both be reflective of students' overall perceptions, including perceptions of others' beliefs.
Student Experiences	Perceptions	Compared to my Black, White, and Hispanic peers, I received less academic support.	My teachers believed I needed less academic support than my Black, White, and Hispanic peers.	Re-worded to reflect student beliefs and fit into "Perceptions" construct.
Student Experiences	Perceptions	Compared to my Black, White, and Hispanic peers, I received less help developing my time management and organizational skills.	My teachers believed I needed less help developing my time management and organizational skills than my Black, White, and Hispanic peers.	Re-worded to reflect student beliefs and fit into "Perceptions" construct.
Student	Perceptions	Compared to my peers from	My peers from other cultural groups	Re-worded to fit into "Perceptions" construct by

Construct prior to unstructured sorting	Construct following unstructured sorting	Item prior to unstructured sorting	Item following unstructured sorting	Explanation of Change
Experiences		other cultural groups, I felt less connected to my school's culture.	felt more connected to the school than I did.	demonstrating student perception of others' experiences as well as own.
Student Experiences	Perceptions	In my school environment, I was very aware of being from my cultural background.	My cultural background was something others were very aware of.	Re-worded to fit into "Perceptions" construct by demonstrating student perception of others' experiences or beliefs.
Executive Functioning	No change	It would have been beneficial to me if my teachers reminded me to write down assignments and/or due dates.	It would have been beneficial to me if my teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.	Judges' feedback indicated a lack of clarity regarding the connection between executive functioning and practicing writing down due dates.
Executive Functioning	No change	My teachers reminded me to write down assignments and/or due dates.	My teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.	Judges' feedback indicated a lack of clarity regarding the connection between executive functioning and practicing writing down due dates.
Executive Functioning	No change	When working on in-class assignments, it would have been beneficial to me if my teachers checked on my progress to help me stay on track.	When working on in-class assignments, it would have been beneficial to me if my teachers supported me in regulating my behavior by periodically checking on my progress to help me stay on track.	Judges' feedback indicated the need to make apparent that this question pertains to executive functioning skills development.
Executive Functioning	No change	When working on in-class assignments, my teachers periodically checked on my progress to help me stay on track.	My teachers supported me in regulating my behavior by periodically checking on my progress to help me stay on track.	Judges' feedback indicated the need to make apparent that this question pertains to executive functioning skills development.
Executive Functioning	No change	When receiving lengthy instructions for an	When receiving lengthy instructions for an assignment, my teachers	Judges' feedback indicated the need to make apparent that this question pertains to executive functioning

Construct prior to unstructured sorting	Construct following unstructured sorting	Item prior to unstructured sorting	Item following unstructured sorting	Explanation of Change
		assignment, my teachers gave me the instructions in chunks.	supported my ability to process information by giving me the instructions in chunks.	skills development.
Executive Functioning	No change	When receiving lengthy instructions for an assignment, it would have been beneficial if my teachers gave me the instructions in chunks.	When receiving lengthy instructions for an assignment, it would have been beneficial if my teachers supported my ability to process information by giving me the instructions in chunks.	Judges' feedback indicated the need to make apparent that this question pertains to executive functioning skills development.
General Academic Support	No change	When learning something new or complex, my teachers periodically stopped to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	When learning something new or complex, it would have been beneficial to me if my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	Judges' feedback indicated the need to make apparent that this question pertains to general academic support.
General Academic Support	No change	When learning something new or complex, my teachers periodically stopped to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	When learning something new or complex, my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	Judges' feedback indicated the need to make apparent that this question pertains to general academic support.
General Academic Support	No change	When preparing for a quiz or test, it would have been beneficial to me if my teachers provided me with additional opportunities to	When preparing for a quiz or test, it would have been beneficial if my teachers supported my learning by providing me additional opportunities to review what I	Judges' feedback indicated the need to make apparent that this question pertains to general academic support. Additionally, the question's wording was adjusted to be more consistent with others within this construct

Construct prior to unstructured sorting	Construct following unstructured sorting	Item prior to unstructured sorting	Item following unstructured sorting	Explanation of Change
		review what I learned.	learned.	
General Academic Support	No change	When preparing for a quiz or test, my teachers provided me with additional opportunities to review what I learned.	When preparing for a quiz or test, my teachers supported my learning by providing me additional opportunities to review what I learned.	Judges' feedback indicated the need to make apparent that this question pertains to general academic support. Additionally, the question's wording was adjusted to be more consistent with others within this construct
Received general academic support	Desired general academic support	I could have benefitted from more general academic support than I received from my K-12 teachers.	No change	While this item was correctly identified as measuring general academic support in the first stage, in this stage, it became apparent that the wording reflects desired support rather than received support, in spite of referencing received support.
Received support in executive functioning	Desired support in executive functioning	I could have benefitted from more support in building my time management and organizational skills than I received from my K-12 teachers.	No change	While this item was correctly identified as measuring executive functioning support in the first stage, in this stage, it became apparent that the wording reflects desired support rather than received support.

Note. Adapted from "Verifying survey items for Construct Validity: A two-stage Sorting Procedure for Questionnaire Design in Information Behavior Research," by N. K. Agarwal, 2011. *Proceedings of the American Society for Information Science and Technology, 48*(1), p. 4.

APPENDIX K

Results of Structured Sorting Exercise

Table K1

Results of Structured Sorting Exercise

Target Category	Actual Judge-Assigned Category						
	DGA	RGA	DEF	REF	SP	Combined Total	Hit Rate (%)
DGA	9					9	100.0%
RGA		6				6	100.0%
DEF	2		16			18	88.9%
REF		2		13		15	86.7%
SP					27	27	100%
AVERAGE							95.1%

Note. The combined totals are based on three judges' responses. Table adapted from "Verifying survey items for Construct Validity: A two-stage Sorting Procedure for Questionnaire Design in Information Behavior Research," by N. K. Agarwal, 2011. *Proceedings of the American Society for Information Science and Technology, 48*(1), p. 4.

Table K2

Item Changes Following Structured Sorting Exercise

Construct prior to unstructured sorting	Construct following unstructured sorting	Item prior to unstructured sorting	Item following unstructured sorting	Explanation of Change
Desired support in executive functioning	No change	When working on in-class assignments, it would have been beneficial to me if my teachers supported me in regulating my behavior by periodically checking on my progress to help me stay on track.	When working on in-class assignments, it would have been beneficial to me if my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.	This item's wording made it less clear that it measures executive functioning skills, as opposed to measuring general academic support
Received support in executive functioning	No change	When working on in-class assignments, my teachers supported me in regulating my behavior by periodically checking on my progress to help me stay on track.	When working on in-class assignments, my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.	This item's wording made it less clear that it measures executive functioning skills, as opposed to measuring general academic support

Note. Adapted from "Verifying survey items for Construct Validity: A two-stage Sorting Procedure for Questionnaire Design in Information Behavior Research," by N. K. Agarwal, 2011. *Proceedings of the American Society for Information Science and Technology, 48*(1), p. 4.

APPENDIX L

Final Revisions to Survey Composite Scales

Table L1

Final Revisions to Composite Scales in Survey

Original construct	Final construct	Changes to items comprising construct	Explanation of Change
Perceptions	Perceptions of Teachers' Low Cultural Competence	Three survey items were removed: • "My K-12 teachers did not really understand me as a person." • "My peers from other cultural groups felt more connected to the school than I did." • "My cultural background was something others were very aware of"	The survey items contained within this index specifically measure students' perceptions of their teachers' low cultural competence.
Perceptions	Lack of Connectedness to School	Two survey items were included: • "My K-12 teachers did not really understand me as a person." • "My peers from other cultural groups felt more connected to the school than I did."	The survey items contained within this index specifically measure students' connectedness to school, as measured by a survey item that explicitly asks about connectedness, and a survey item that asks about feeling understood by teachers.
Perceptions	N/A	"My cultural background was something others were very aware of" was removed from survey.	

Note. The original construct called "Perceptions" was divided into two categories called "Perceptions of Teachers' Low Cultural Competence" and "Lack of Connectedness to School.

APPENDIX M

Likert Scale Revisions

Table M1

Desired General Academic Support Needs – Modified Likert Scale

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
When learning something new or complex, it would have been beneficial to me if my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	SD	D	A	SA
When preparing for a quiz or test, it would have been beneficial if my teachers supported my learning by providing me additional opportunities to review what I learned.	SD	D	A	SA
I could have benefitted from more general academic support than I received from my K-12 teachers.	SD	D	A	SA

Table M2

Received General Academic Supports – Modified Likert Scale

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
When learning something new or complex, my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	SD	D	A	SA
When preparing for a quiz or test, my teachers supported my learning by providing me additional opportunities to review what I learned.	SD	D	A	SA

Table M3

Desired Executive Functioning Academic Support Needs – Likert Scale

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
When receiving lengthy instructions for an assignment, it would have been beneficial if my teachers supported my ability to process information by giving me the instructions in chunks.	SD	D	A	SA
When working on in-class assignments, it would have been beneficial to me if my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.	SD	D	A	SA
It would have been beneficial to me if my teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.	SD	D	A	SA
It would have been beneficial to me if my teachers helped me with my time management skills.	SD	D	A	SA
It would have been beneficial to me if my teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).	SD	D	A	SA
I could have benefitted from more support in building my time management and organizational skills than I received from my K-12 teachers.	SD	D	A	SA

Table M4

Received Executive Functioning Academic Supports – Likert Scale

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
When receiving lengthy instructions for an assignment, my teachers supported my ability to process information by giving me the instructions in chunks.	SD	D	A	SA
When working on in-class assignments, my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.	SD	D	A	SA
My teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.	SD	D	A	SA
My teachers helped me with my time management skills.	SD	D	A	SA
My teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).	SD	D	A	SA

Table M5

Perceptions of Teachers' Low Cultural Competence

Survey Item	Strongly Agree	Agree	Disagree	Strongly Disagree
My K-12 teachers made assumptions about me based on my cultural background.	SA	A	D	SD
As compared with students from other cultures, my K-12 teachers knew little about my cultural heritage.	SA	A	D	SD
My K-12 teachers tended to group Indian American students in with all Asian Americans.	SA	A	D	SD
As compared with Black, White, and/or Hispanic students, my K-12 teachers tended to assume I was particularly smart.	SA	A	D	SD
My teachers believed I needed less academic support than my Black, White, and Hispanic peers.	SA	A	D	SD
My teachers believed I needed less help developing my time management and organizational skills than my Black, White, and Hispanic peers.	SA	A	D	SD

Table M6

Lack of Connectedness to School

Survey Item	Strongly Agree	Agree	Disagree	Strongly Disagree
My K-12 teachers did not really understand me as a person.	SA	A	D	SD
My peers from other cultural groups felt more connected to the school than I did.	SA	A	D	SD

APPENDIX N

Survey Instrument Second Draft

Survey Items Related to Academic Support

Desired General Academic Support Needs

1. When learning something new or complex, it would have been beneficial to me if my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.

2. When preparing for a quiz or test, it would have been beneficial if my teachers supported my learning by providing me additional opportunities to review what I learned.

3. I could have benefitted from more general academic support than I received from my K-12 teachers.

Received General Academic Support Needs

4. When learning something new or complex, my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.

5. When preparing for a quiz or test, my teachers supported my learning by providing me additional opportunities to review what I learned.

Desired Executive Functioning Support Needs

6. When receiving lengthy instructions for an assignment, it would have been beneficial if my teachers supported my ability to process information by giving me the instructions in chunks.

7. When working on in-class assignments, it would have been beneficial to me if my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.

8. It would have been beneficial to me if my teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.

9. It would have been beneficial to me if my teachers helped me with my time management skills.

10. It would have been beneficial to me if my teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).

11. I could have benefitted from more support in building my time management and organizational skills than I received from my K-12 teachers.

Received Executive Functioning Support Needs

12. When receiving lengthy instructions for an assignment, my teachers supported my ability to process information by giving me the instructions in chunks.

13. When working on in-class assignments, my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.

14. My teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.

15. My teachers helped me with my time management skills.

16. My teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).

Survey Items Related to Perceptions of Teachers' Cultural Competence

17. My K-12 teachers made assumptions about me based on my cultural background.

18. As compared with students from other cultures, my K-12 teachers knew little about my cultural heritage.

19. My K-12 teachers tended to group Indian American students in with all Asian Americans.

20. As compared with Black, White, and/or Hispanic students, my K-12 teachers tended to assume I was particularly smart.

21. My teachers believed I needed less academic support than my Black, White, and Hispanic peers.

22. My teachers believed I needed less help developing my time management and organizational skills than my Black, White, and Hispanic peers.

23. My K-12 teachers did not really understand me as a person.

Survey Items Related to Lack of Connectedness to School

24. My peers from other cultural groups felt more connected to the school than I did.

25. My cultural background was something others were very aware of.

Constructed Response Questions

1. Could teachers have better supported you or your academic needs better? How?

2. What did your teachers believe about you, your cultural identity, and your background? Did they understand you?

3. What was your overall experience like as a student?

APPENDIX O

Changes in Survey Items Following Cognitive Interview

Table O1

Changes in Survey Items Following Cognitive Interview

Item prior to cognitive interview	Item following cognitive interview
When learning something new or complex, it would have been beneficial to me if my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	When learning something new or complex, I wanted teachers to support my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.
When preparing for a quiz or test, it would have been beneficial if my teachers supported my learning by providing me additional opportunities to review what I learned.	When preparing for a quiz or test, I wanted teachers to support my learning by providing me additional opportunities to review what I learned.
I could have benefitted from more general academic support than I received from my K-12 teachers.	Generally speaking, I could have benefitted from more general academic support than I received from some of my teachers.
When learning something new or complex, my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	When learning something new or complex, my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.
When preparing for a quiz or test, my teachers supported my learning by providing me additional opportunities to review what I learned.	When preparing for a quiz or test, my teachers supported my learning by providing me additional opportunities to review what I learned.
When receiving lengthy instructions for an assignment, it would have been beneficial if my teachers supported my ability to process information by giving me the instructions in chunks.	When receiving lengthy instructions for an assignment, it would have been helpful if my teachers supported my ability to process information by giving me the instructions in chunks.
When working on in-class assignments, it would have been beneficial to me if my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.	When working on in-class assignments, it would have been helpful if my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.
It would have been beneficial to me if my teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.	It would have been helpful if my teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.
It would have been beneficial to me if my teachers helped me with my time management	It would have been helpful if my teachers supported me in developing time management

Item prior to cognitive interview	Item following cognitive interview
skills.	skills.
It would have been beneficial to me if my teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).	It would have been helpful if my teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).
I could have benefitted from more support in building my time management and organizational skills than I received from my K-12 teachers.	Generally speaking, I could have benefitted from more support in building my time management and organizational skills than I received from some of my teachers.
When receiving lengthy instructions for an assignment, my teachers supported my ability to process information by giving me the instructions in chunks.	When giving lengthy instructions for an assignment, my teachers supported my ability to process information by giving me the instructions in chunks.
When working on in-class assignments, my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.	When working on in-class assignments, my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.
My teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.	My teachers supported me in developing time management skills by reminding me to write down assignments and/or due dates.
My teachers helped me with my time management skills.	My teachers helped me develop time management skills.
My teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).	My teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).
My K-12 teachers made assumptions about me based on my cultural background.	Generally speaking, my teachers made assumptions about me based on my cultural background.
As compared with students from other cultures, my K-12 teachers knew little about my cultural heritage.	Generally speaking, as compared with students from other cultures, my teachers seemed to know little about my cultural heritage.
My K-12 teachers tended to group Indian American students in with all Asian Americans.	Generally speaking, my teachers seemed to group Indian American students in with all Asian Americans.
As compared with Black, White, and/or Hispanic students, my K-12 teachers tended to assume I was particularly smart.	Generally speaking, as compared with Black, White, and/or Hispanic students, my teachers seemed to assume I was smart.
My teachers believed I needed less academic support than my Black, White, and Hispanic peers.	Generally speaking, my teachers seemed to believe I needed less academic support than my Black, White, and Hispanic peers.
My teachers believed I needed less help developing my time management and	Generally speaking, my teachers seemed to believe I needed less help developing my time

Item prior to cognitive interview	Item following cognitive interview
organizational skills than my Black, White, and Hispanic peers.	management and organizational skills than my Black, White, and Hispanic peers.
My K-12 teachers did not really understand me as a person.	Generally speaking, my teachers did not seem to understand me as a person.
My peers from other cultural groups felt more connected to the school than I did.*	Generally speaking, my peers from other cultural groups seemed to feel more connected to the school than I did.
My cultural background was something others were very aware of.	Generally speaking, my cultural background was something others seemed very aware of.
Could teachers have better supported you or your academic needs better? How?	Could teachers have better supported you or your academic needs better? How?
What did your teachers believe about you, your cultural identity, and your background? Did they understand you?	Do you think your teachers understood you, your cultural identity, and your background? Why?
What was your overall experience like as a student?	In the context of your relationship with teachers, what was your overall experience like as a student?

Note. An additional question was added to the survey, and question order was revised.
* This question was ultimately omitted from the scales in the study due to ambiguity.

APPENDIX P

Survey Instrument Final Draft

Preliminary Questions

1. Do you identify as Asian/Asian American?
   This question requires an answer in the affirmative; a negative response submits the survey and closes out. This question is required to determine whether the participant is eligible for the survey.

2. What is your cultural background?
   Open-Ended Dialogue Box with the following prompt: "Please consider including ethnicity, race, nationality, background, or heritage. You may include as many terms as are appropriate. You may also include religion, and any other cultural identification you choose." This question supports eligibility, and will help the researcher in examining responses based on cultural demographic data.

3. What is the highest level of education you have attained? (If you are currently pursuing a degree, you may indicate this)
   This is an open-ended demographic question that will be used to examine data.

4. What sort of school did you attend for your K-12 education? (Select one: Public, Private – Non-religious, Private – Religious, Charter, Other _____)
   This is a multiple-choice demographic question, with an open-ended "other" option, that will be used to examine data.

Cultural Values*

For each of the following items, please reflect on your experiences as a student in primary or secondary school, and indicate the degree to which you agree or disagree with the statement.

The following items relate values you may have had as a student.

1. Self-reliance (or relying on myself when completing school-related tasks) was very important to me.
   [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

2. Respecting teachers was very important to me.
   [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

3. Earning good grades was very important to me.
   [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

4. Showing others that I was smart was very important to me.

[Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

5. Making my family proud was very important to me.
   [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

Desired Support(s)

For each of the following items, please reflect on your experiences as a student in primary or secondary school, and indicate the degree to which you agree or disagree with the statement.

General Academic Support Needs

The following items relate to general academic support(s) you may have wanted.

6. When learning something new or complex, I wanted teachers to support my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.
   [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

7. When preparing for a quiz or test, I wanted teachers to support my learning by providing me additional opportunities to review what I learned.
   [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

8. Generally speaking, I could have benefitted from more general academic support than I received from some of my teachers.
   [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

Executive Functioning Support Needs

The following items relate to executive functioning skills support(s) you may have wanted.

9. When receiving lengthy instructions for an assignment, it would have been helpful if my teachers supported my ability to process information by giving me the instructions in chunks.
   [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

10. When working on in-class assignments, it would have been helpful if my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

11. It would have been helpful if my teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

12. It would have been helpful if my teachers supported me in developing time management skills.
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

13. It would have been helpful if my teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

14. Generally speaking, I could have benefitted from more support in building my time management and organizational skills than I received from some of my teachers.
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

Received Support(s)

For each of the following items, please reflect on your experiences as a student in primary or secondary school, and indicate the degree to which you agree or disagree with the statement.

General Academic Support Needs

The following items relate to received academic support(s).

15. When learning something new or complex, my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

16. When preparing for a quiz or test, my teachers supported my learning by providing me additional opportunities to review what I learned.
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

Executive Functioning Support Needs

The following items relate to received executive functioning skills support(s).

17. When giving lengthy instructions for an assignment, my teachers supported my ability to process information by giving me the instructions in chunks.
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

18. When working on in-class assignments, my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

19. My teachers supported me in developing time management skills by reminding me to write down assignments and/or due dates.
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

20. My teachers helped me develop time management skills.
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

21. My teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).
    [Strongly Agree] [Agree] [Disagree] [Strongly Disagree]

Perceptions and Experiences

For each of the following items, please reflect on your experiences as a student in primary or secondary school, and indicate the degree to which you agree or disagree with the statement.

The following items relate to experiences you may have had as a student.

22. Generally speaking, my teachers made assumptions about me based on my cultural background.
    [Strongly Disagree] [Disagree] [Agree] [Strongly Agree]

23. Generally speaking, as compared with students from other cultures, my teachers seemed to know little about my cultural heritage.
    [Strongly Disagree] [Disagree] [Agree] [Strongly Agree]

24. Generally speaking, my teachers seemed to group Indian American students in with all Asian Americans.
    [Strongly Disagree] [Disagree] [Agree] [Strongly Agree]

25. Generally speaking, as compared with Black, White, and/or Hispanic students, my teachers seemed to assume I was smart.
    [Strongly Disagree] [Disagree] [Agree] [Strongly Agree]

26. Generally speaking, my teachers seemed to believe I needed less academic support than my Black, White, and Hispanic peers.
    [Strongly Disagree] [Disagree] [Agree] [Strongly Agree]

27. Generally speaking, my teachers seemed to believe I needed less help developing my time management and organizational skills than my Black, White, and Hispanic peers.
    [Strongly Disagree] [Disagree] [Agree] [Strongly Agree]

28. Generally speaking, my teachers did not seem to understand me as a person.
    [Strongly Disagree] [Disagree] [Agree] [Strongly Agree]

29. Generally speaking, my peers from other cultural groups seemed to feel more connected to the school than I did.
    [Strongly Disagree] [Disagree] [Agree] [Strongly Agree]

30. Generally speaking, my cultural background was something others seemed very aware of.
    [Strongly Disagree] [Disagree] [Agree] [Strongly Agree]

For the remaining three items, please reflect on your experiences as a student in primary or secondary school, and share a response.

1. Could teachers have better supported you or your academic needs better? How?

2. Do you think your teachers understood you, your cultural identity, and your background? Why?

3. In the context of your relationship with teachers, what was your overall experience like as a student?

Note. *****The five items under "Cultural Values" were not included in the analyses for this study.

APPENDIX Q

HIRB Digital Informed Consent Form for Study

Johns Hopkins University
Homewood Institutional Review Board (HIRB)

DIGITAL INFORMED CONSENT FORM

Title: **Perceived Impact of Teachers' Cultural Competence on South Asian Americans**

Principal Investigator: **Dr. Christine Eith (adviser to Punita Chhabra Rice)**

Date: **April 26, 2016**

PURPOSE OF RESEARCH STUDY:

- The purpose of this research study is to examine the K-12 educational experiences and perceptions of Indian and Asian American individuals, and to examine their perceptions of their former teachers' cultural competence in supporting them and diverse student groups. A long-term goal of this study is to contribute to the literature on Indian American students' education experiences, since existing literature is extremely limited and does not examine the experiences or needs of Indian American students.
- We aim to include approximately 270 participants in this study, however, we are not confident that we will be able to obtain a sample of this size. A more realistic estimate of participants is 100.

PROCEDURES:

- The study has a single component, consisting of an online survey. As a participant, you are asked to do your best to think about each answer and respond honestly, and with care.
- The survey should take approximately ten minutes of your time.

RISKS/DISCOMFORTS:

- The risks associated with participation in this study are no greater than those encountered in daily life. There are no significant anticipated risks to participants.

BENEFITS:

- There are no direct benefits to you from participating in this study.
- This study's results may be beneficial to the existing literature on Indian American students' education experiences, which is currently very limited.
- This study's results may be valuable in improving teaching, which in turn may improve academic outcomes for future K-12 students (especially Indian American students).
- This study may benefit society if the results lead to a better understanding of how low cultural competence impacts the amount of academic support students receive.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:

- Your participation in this study is entirely voluntary: You choose whether to participate. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled. If you choose to participate in the study, you can stop your participation at any time, without penalty or loss of benefits. If you want to withdraw, simply stop completing the survey.

CONFIDENTIALITY:

- This study is anonymous, and any study records (timestamps, etc.) that could be used to identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board, and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. (All of these people are required to keep your identity confidential.) Otherwise, records that identify you will be available only to people working on the study.
- No identifiable information will be included in any reports of the research published.
- Survey data completed electronically will be collected via a password protected Google forms account that belongs to the researcher.

COMPENSATION:

- You will not receive any payment or other compensation for participating in this study.

IF YOU HAVE QUESTIONS OR CONCERNS:

- You can ask questions about this research study now or at any time during the study, by talking to the researcher(s) working with you, or by contacting Punita Chhabra Rice via email or phone: punita@jhu.edu or (240) 863-2374.
- If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

ANONYMOUS DIGITAL SIGNATURE

WHAT YOUR DIGITAL SIGNATURE MEANS:

Selecting "agree" below serves as your anonymous digital signature. If you select agree, it means you understand the information in this consent form. Selecting agree also means that you agree to participate in the study. By selecting agree, you have not waived any legal rights you otherwise would have as a participant in a research study. If you wish to participate, please select "agree" below. If you do not wish to participate in the study, please decline participation by selecting "disagree," or by exiting this page.

[Agree] [Disagree] [Date Automatically Recorded]

[Link to PDF copy of form included]

APPENDIX R

Participant Letter Requesting Recruitment Help

Dear [Individual],

My name is Punita Chhabra Rice, and I am a doctoral student in the Ed.D program at Johns Hopkins University. I am reaching out to request your help in recruiting participants for a study.

The primary purpose of the study is to examine South Asian Americans' perceptions of their teachers' cultural competence, and its impact on them. A long-term goal is to contribute to the literature on South Asian American and Asian American students' education experiences and perceptions, since the existing literature is very limited.

If you can, please share the information at the bottom of this message with any eligible participants you can. These would include: **South Asian American and Asian American adults, who have attended a K-12 school**. Survey responses will be accepted until December 1, 2016.

If you have any questions or concerns, please contact me at (240) 863-2374, or punita@jhu.edu. Further details are available on the first page of the survey. Thank you in advance for your help in recruiting participants, and for your support in conducting this study!

Very best,

Punita Chhabra Rice, M.A.T.
Doctoral Student
Johns Hopkins University School of Education

_ _

Are you Asian or South Asian American? Are you a former K-12 student? Are you over 18?
If you answered yes to these three questions, then we need *you* for a study
on the experiences and perceptions of Indian and Asian American students!

Punita Chhabra Rice, a doctoral student at Johns Hopkins University's Ed.D program is looking for participants for a study examining how South Asian Americans perceive their teachers' cultural competence, and how they are impacted by it. The survey should take approximately ten minutes of your time, and your participation is extremely valuable in contributing to the literature on South Asian American students, their experiences, and their needs. Currently, literature in this field is very limited. If you decide to participate, please click the link below. On the first page, you can find more information, along with the digital consent form. Please consider participating, and sharing this with others who are eligible to participate. Thank you in advance!

http://survey.punitalearning.com

APPENDIX S

Participant Letters for Direct Sharing

Are you Asian American, South Asian American, and/or Indian American?
Are you a former K-12 student?
Are you over 18?

If you answered yes to these three questions, then we need *you* for a study
on the experiences and perceptions of Indian and Asian American students!

Punita Chhabra Rice, a doctoral student at Johns Hopkins University's Ed.D program is looking for participants for a study examining how Asian, South Asian, and Indian Americans perceive their teachers' cultural competence, and how they are impacted by it.

The survey should take approximately ten minutes of your time, and your participation is extremely valuable in contributing to the literature on Indian American students, their experiences, and their needs. Currently, literature in this field is very limited.

If you decide to participate, please click the link below. On the first page, you can find more information, along with the digital consent form. Please consider participating, and sharing this with others who are eligible to participate. Thank you in advance!

http://survey.punitalearning.com

APPENDIX T

Combined Scales for Support Needs

Table T1

Desired Supports

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
When learning something new or complex, I wanted teachers to support my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	SD	D	A	SA
When preparing for a quiz or test, I wanted teachers to support my learning by providing me additional opportunities to review what I learned.	SD	D	A	SA
Generally speaking, I could have benefitted from more general academic support than I received from some of my teachers.	SD	D	A	SA
When receiving lengthy instructions for an assignment, it would have been helpful if my teachers supported my ability to process information by giving me the instructions in chunks.	SD	D	A	SA
When working on in-class assignments, it would have been helpful if my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.	SD	D	A	SA
It would have been helpful if my teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.	SD	D	A	SA
It would have been helpful if my teachers supported me in developing time management skills.	SD	D	A	SA
It would have been helpful if my teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).	SD	D	A	SA
Generally speaking, I could have benefitted from more support in building my time management and organizational skills than I received from some of my teachers.	SD	D	A	SA

Table T2

Received Supports

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
When learning something new or complex, my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	SD	D	A	SA
When preparing for a quiz or test, my teachers supported my learning by providing me additional opportunities to review what I learned.	SD	D	A	SA
When giving lengthy instructions for an assignment, my teachers supported my ability to process information by giving me the instructions in chunks.	SD	D	A	SA
When working on in-class assignments, my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.	SD	D	A	SA
My teachers supported me in developing time management skills by reminding me to write down assignments and/or due dates.	SD	D	A	SA
My teachers helped me develop time management skills.	SD	D	A	SA
My teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).	SD	D	A	SA

APPENDIX U

Combined Scales for Negative Experiences

Table U1

Perceptions of Teachers' Low Cultural Competence

Survey Item	Strongly Agree	Agree	Disagree	Strongly Disagree
Generally speaking, my teachers made assumptions about me based on my cultural background.	SA	A	D	SD
Generally speaking, as compared with students from other cultures, my teachers seemed to know little about my cultural heritage.	SA	A	D	SD
Generally speaking, my teachers seemed to group Indian American students in with all Asian Americans.	SA	A	D	SD
Generally speaking, as compared with Black, White, and/or Hispanic students, my teachers seemed to assume I was smart.	SA	A	D	SD
Generally speaking, my teachers seemed to believe I needed less academic support than my Black, White, and Hispanic peers.	SA	A	D	SD
Generally speaking, my teachers seemed to believe I needed less help developing my time management and organizational skills than my Black, White, and Hispanic peers.	SA	A	D	SD
Generally speaking, my teachers did not seem to understand me as a person.	SA	A	D	SD
Generally speaking, my peers from other cultural groups seemed to feel more connected to the school than I did.	SA	A	D	SD

APPENDIX V

Sources for Participant Recruitment

Attempts to recruit participants included posting recruitment materials (Appendix R) on various public social media pages. This included posting to the researcher's own personal Facebook and Twitter accounts, and posting to the following pages on Facebook. Noted next to each page is the number of members (at the time of posting):

- **Indian American Heritage Project** - 3,937 people
- **Indian-American Women Community** - 784 members
- **Indian Community Group Public Group** - 9,478 members
- **Indian Students Association (ISA) at UMass Lowell** - 2,741 members
- **Indian Students Association (ISA) at University of Cincinnati (UC)** - 4,037 members
- **Indian Students Association - UCSD (Indian Students Association of University of California, San Diego)** - 1,277 members
- **ISA Buckeyes (Indian Students Association at Ohio State)** - 2,072 people
- **JHU Hindu Students Council** - 376 people
- **Maryland Dhoom** - 1,232 people
- **Rutgers ISA: Indian Students Association at Rutgers** - 116 people
- **South Asian Americans Leading Together** - 4,166 people
- **South Asian Event Planning Guide** - 683 people
- **South Asian Literary and Theater Arts Festival (SALTAF)** - 308 people
- **South Asian Students Association at Towson University** - 303 people
- **South Asian Students at Hopkins (SASH)** - 596 people
- **UMBC Ishara (Dance Team)** - 64 people
- **UMBC Sikh Students Association** - 90 members
- **UMD Sikh Students Association** - 65 members

APPENDIX W

Survey Items in Final Draft and Supporting Research

Table W1

Survey Items in Final Draft and Supporting Research

Final Survey Items	Supporting Research
1. When learning something new or complex, I wanted teachers to support my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	When appropriate, a best teaching practice to provide support involves checking for students' understanding, and prompting students to determine their next step as a means to checking for understanding (Jones, Jones, & Jones, 2007). This practice would also be particularly helpful in supporting English language learners (Scarcella & Oxford, 1992). Additionally, teachers should watch students' faces for indication of high cognitive load in order to help any students who might be having difficulty grasping a concept (Jones, Jones, & Jones, 2007).
2. When preparing for a quiz or test, I wanted teachers to support my learning by providing me additional opportunities to review what I learned.	Teachers should offer students opportunities to review and prepare for tests (Jones, Jones, & Jones, 2007), and should help students learn to develop and follow study plans (Bakunas & Holley, 2004).
3. Generally speaking, I could have benefitted from more general academic support than I received from some of my teachers.	Because teachers may believe the model minority myth, hold high expectations for their Asian American students (Kao, 1995; Lee, 2015; Sun, 1998), and believe Asian students are "more academically competent and more emotionally stable" than others (Wong, 1980, p. 241), it is reasonable that this leads them to provide these students with less support than their peers. For those Asian American students who do not fit the model minority stereotype (Li, 2005; Wong, 1980; Yang, 2004), responses to these questions may be of particular significance.
4. When learning something new or complex, my teachers supported my learning by periodically stopping to offer me individual help, to make sure I understood what was being taught, before continuing with instruction.	When appropriate, a best teaching practice to provide support involves checking for students' understanding, and prompting students to determine their next step as a means to checking for understanding (Jones, Jones, & Jones, 2007). This practice would also be particularly helpful in supporting English language learners (Scarcella & Oxford, 1992). Additionally, teachers should watch students' faces for indication of high cognitive load in order to help any students who might be having difficulty grasping a concept (Jones, Jones, & Jones, 2007).

Final Survey Items	Supporting Research
5. When preparing for a quiz or test, my teachers supported my learning by providing me additional opportunities to review what I learned.	Teachers should offer students opportunities to review and prepare for tests (Jones, Jones, & Jones, 2007), and should help students learn to develop and follow study plans (Bakunas & Holley, 2004).
6. When receiving lengthy instructions for an assignment, it would have been helpful if my teachers supported my ability to process information by giving me the instructions in chunks.	Combining information in a meaningful fashion, also called chunking, can increase the amount of information working memory can process (Schunk, 2008), and is a recommended scaffolding strategy for supporting students (Jones, Jones, & Jones, 2007).
7. When working on in-class assignments, it would have been helpful if my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.	Monitoring student progress and checking for accuracy is a helpful teacher behavior, which supports executive functioning skills development (Boller, 2008).
8. It would have been helpful if my teachers supported me in developing my time management skills by reminding me to write down assignments and/or due dates.	It is a best practice for teachers to support students in recording assignments and due dates in their assignment books (Bakunas & Holley, 2004).
9. It would have been helpful if my teachers supported me in developing time management skills.	Supporting students in building their organization behaviors such as time management is a recommended teaching practice (Bakunas & Holley, 2004) that supports students' developmental progress (Boller, 2008).
10. It would have been helpful if my teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).	Helping students build their skills in organizing their schoolwork and supplies is a form of organization support teachers should provide students (Bakunas & Holley, 2004). Additionally, Teachers may tend to see their Asian students as emotionally stable and competent (Wong, 1980), and may consequently provide them with less support in these sorts of skills. This is problematic, because while executive functioning skills begin developing when students are middle-school age, they do not mature until young adulthood (Boller, 2008). Consequently, all secondary-school aged students need teacher support in building these skills for their developmental learning (Boller, 2008), suggesting teachers must provide support in these skills to all students. However, teachers tend overestimate all students' executive functioning skills (Boller, 2008).

Final Survey Items	Supporting Research
11. Generally speaking, I could have benefitted from more support in building my time management and organizational skills than I received from some of my teachers.	Supporting students in building their organization behaviors such as time management is a recommended teaching practice (Bakunas & Holley, 2004) that supports students' developmental progress (Boller, 2008).
12. When giving lengthy instructions for an assignment, my teachers supported my ability to process information by giving me the instructions in chunks.	Combining information in a meaningful fashion, also called chunking, can increase the amount of information working memory can process (Schunk, 2008), and is a recommended scaffolding strategy for supporting students (Jones, Jones, & Jones, 2007).
13. When working on in-class assignments, my teachers supported me in managing my time, by periodically checking on my progress to help me stay on track.	Monitoring student progress and checking for accuracy is a helpful teacher behavior, which supports executive functioning skills development (Boller, 2008).
14. My teachers supported me in developing time management skills by reminding me to write down assignments and/or due dates.	It is a best practice for teachers to support students in recording assignments and due dates in their assignment books (Bakunas & Holley, 2004).
15. My teachers helped me develop time management skills.	Supporting students in building their organization behaviors such as time management is a recommended teaching practice (Bakunas & Holley, 2004) that supports students' developmental progress (Boller, 2008).
16. My teachers provided me with strategies for keeping items related to their classes (worksheets, assignments, notes, etc.) organized in my binder (or other organization device).	Helping students build their skills in organizing their schoolwork and supplies is a form of organization support teachers should provide students (Bakunas & Holley, 2004). Additionally, Teachers may tend to see their Asian students as emotionally stable and competent (Wong, 1980), and may consequently provide them with less support in these sorts of skills. This is problematic, because while executive functioning skills begin developing when students are middle-school age, they do not mature until young adulthood (Boller, 2008). Consequently, all secondary-school aged students need teacher support in building these skills for their developmental learning (Boller, 2008), suggesting teachers must provide support in these skills to all students. However, teachers tend overestimate all students' executive functioning skills (Boller, 2008).
17. Generally speaking, my teachers made assumptions about me based on my cultural background.	Teachers may hold Asian American students to the model minority stereotype (Wong, 1980), even when it does not fit (Li, 2005; Yang, 2004).
18. Generally speaking, as compared with students from other cultures, my teachers	Existing literature suggests teachers do not have high cultural competence related to various Asian cultures (Chang & Sue, 2003), which indicates they do not know much about South Asian American students'

Final Survey Items	Supporting Research
seemed to know little about my cultural heritage.	culture, and needs, especially as compared to other groups. Culturally responsive instruction involves "using the cultural characteristics, experiences and perspectives of ethnically diverse students as conduits for teaching more effectively" (Gay, 2010, p. 106); thus, when cultural competence is absent, it may negatively impact teachers' ability to provide culturally responsive instruction, making it important to determine whether students felt their teachers understood their cultures. This is particularly true because students need culturally responsive teaching and support in order to reach maximum potential (Hammond, 2014).
19. Generally speaking, my teachers seemed to group Indian American students in with all Asian Americans.	Existing research treats all Asian American students as a single group, without variation (Blair & Qian, 1998; Lee, 1994; Littlewood, 2000; Ogbu, 1987; Yang, 2004), suggesting teachers may also tend to do this, which may impact their competency in understanding Indian American culture.
20. Generally speaking, as compared with Black, White, and/or Hispanic students, my teachers seemed to assume I was smart.	Literature indicates teachers tend to believe the model minority myth (Chang & Sue, 2003; Kao, 1995; Lee, 2015; Sun, 1998; Yang, 2004), and that Asian American students are "more academically competent and more emotionally stable" than others (Wong, 1980, p. 241).
21. Generally speaking, my teachers seemed to believe I needed less academic support than my Black, White, and Hispanic peers.	Cultural competence plays a large role in culturally responsive teaching, builds meaningful teacher-student relationships (Hammond, 2014).
22. Generally speaking, my teachers seemed to believe I needed less help developing my time management and organizational skills than my Black, White, and Hispanic peers.	Given that teachers tend overestimate the executive functioning skills of all students (Boller, 2008), and because they may tend to see Asian students as a model minority (Wong, 1980), they may be more likely to overestimate the executive functioning skills of their South Asian and Indian American students.
23. Generally speaking, my teachers did not seem to understand me as a person.	Getting to know students personally is a factor influencing student experience and motivation (Adams & Pierce, 2004). Effective teachers build positive relationships with their students (Adams & Pierce, 2004). Such relationships tend to improve students' engagement and success (Klem & Connell, 2004), their sense of connectedness to school (McNeely & Falci, 2004), and their self-esteem and sense of importance (Adams & Pierce, 2004).
24. Generally speaking, my peers from other cultural groups seemed to feel more connected to the school than I did.	Asian Americans may perceive isolation from other cultural groups (O'Brien, 2008). Further, the perception of Asian Americans as a model minority "promotes interracial tension between Asian Americans and other groups," (Lee, 2015, p. 2), which can reasonably be thought to harm students' connectedness to their school communities.
Constructed Response Question 1: Could teachers have better supported you or	Because teachers may believe the model minority myth, hold high expectations for their Asian American students (Kao, 1995; Lee, 2015; Sun, 1998), and believe Asian students are "more academically competent and more emotionally stable" than others (Wong, 1980, p. 241), it is reasonable that this leads them to

Final Survey Items	Supporting Research
your academic needs better? How?	provide these students with less support than their peers. For those Asian American students who do not fit the model minority stereotype (Li, 2005; Wong, 1980; Yang, 2004), responses to these questions may be of particular significance. Further, helping students build their skills in organizing their schoolwork and supplies is a form of organization support teachers should provide students (Bakunas & Holley, 2004). Additionally, Teachers may tend to see their Asian students as emotionally stable and competent (Wong, 1980), and may consequently provide them with less support in these sorts of skills. This is problematic, because while executive functioning skills begin developing when students are middle-school age, they do not mature until young adulthood (Boller, 2008). Consequently, all secondary-school aged students need teacher support in building these skills for their developmental learning (Boller, 2008), suggesting teachers must provide support in these skills to all students. However, teachers tend overestimate all students' executive functioning skills (Boller, 2008).
Constructed Response Question 2: Do you think your teachers understood you, your cultural identity, and your background? Why?	Getting to know students personally is a factor influencing student experience and motivation (Adams & Pierce, 2004). Effective teachers build positive relationships with their students (Adams & Pierce, 2004). Such relationships tend to improve students' engagement and success (Klem & Connell, 2004), their sense of connectedness to school (McNeely & Falci, 2004), and their self-esteem and sense of importance (Adams & Pierce, 2004). However, teachers may hold stereotypical beliefs about their Asian and Indian American students. which may inhibit their ability to make a strong personal connection with them or understand them.
Constructed Response Question 3: In the context of your relationship with teachers, what was your overall experience like as a student?	Asian Americans may perceive isolation from other cultural groups (O'Brien, 2008), which may impact their overall experience as students. That he perception of Asian Americans as a model minority "promotes interracial tension between Asian Americans and other groups," (Lee, 2015, p. 2) may also impact these students' connectedness to their school communities and overall experience. Further, culturally responsive teaching, which is dependent on cultural competence, is very important for the experiences of diverse students (Santamaria, 2009). This question seeks to examine how students would evaluate or describe their experiences broadly, with the underlying assumption that these experiences would be impacted by their status as Indian or Asian Americans.

APPENDIX X

Definition of Terms

Given that many definitions exist for many of the terms used in this study, the following definitions are provided to provide greater clarity:

- South Asian American: American individuals who trace ancestry, or connection through cultural identification, racial/ethnic identification, or nationality, to the countries of India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, and the Maldives (Afghanistan is sometimes included in this definition), and simultaneously identify as American.
- Cultural competence, or cultural proficiency, are used interchangeably in this study, and refer to holding a high level of knowledge, literacy, skills, and attitudes and beliefs (JohnBull, 2012) about a particular group, such that the person would be able work well with, respond effectively to, and to be supportive of people in cross-cultural settings (Cross, 1989; Gay, 2010; Guerra & Nelson, 2007; Hammond, 2014; Nieto, 2013). This term will be used in reference to teachers' ability to support culturally and linguistically diverse (CLD) students by understanding their values, traditions, communication patterns, learning styles, contributions, and relational patterns of their students from different cultural backgrounds (Gay, 2002).
- Model Minority Myth and/or Model Minority Stereotype: Refers to a perception of students from Asian American backgrounds as being successful and non-oppressed, and seeming to be 'model students' (Lee, 2015; Leong, Chao, & Hardin, 2000; Wong, 1980). This view is often referred to as the model minority *myth* due to the misleading and incorrect nature of the stereotype (Leong, Chao, & Hardin, 2000).
- Academic support refers to two types of academic support: (1) General academic support (such as checking on students while working, providing assistance in completing classwork, aiding students in preparing for assessments); (2) Academic support in executive functioning or organizational skills such as planning, time management, self-monitoring, behavioral regulation, and self-monitoring, which are essential for students' developmental learning (Boller, 2008).
- Students' experiences refer to their satisfaction with school as influenced by relationships with teachers (Klem & Connell, 2004), and/or overall happiness with school.

CURRICULUM VITAE

Punita Chhabra Rice
punita@jhu.edu | Baltimore, Maryland

EDUCATION

Ed.D. Entrepreneurial Leadership in Education **Expected 2017**
Johns Hopkins University, Baltimore, MD
Dissertation: *South Asian Americans' Perceptions of Experiences in School in Context of Teacher Cultural Competence*

M.A.T. Secondary Social Studies Education **2012**
Loyola University Maryland, Baltimore, MD
Action Research: *Motivating Students Using Cooperative Competition to Increase Student Engagement*

B.A. Psychology **2009**
University of Maryland, College Park, MD
Scholars Certificate: *Media, Self & Society*

PROFESSIONAL LICENSURE

Maryland State Department of Education Certifications:
Secondary Education Certification – Received 2013
Social Studies Education Certification – Received 2013
English Endorsement – Received 2013

EDUCATION EXPERIENCE

Johns Hopkins University
Teaching Assistant (2016)
Served as graduate teaching assistant in Disciplinary Approaches to Education (ED 855.718) for Doctor of Education program at Johns Hopkins University School of Education, and Mind, Brain Science, and Learning (ED 855.708).
Responsible for: Facilitating, grading discussions for doctoral students through Blackboard platform, promoting scholarly dialogue, synthesizing discussions for briefings, providing feedback on APA formatting and writing conventions for course assignments.
Course Descriptions:

Disciplinary Approaches Education (Doctoral level):
Educators use theories, concepts and approaches from sociology, economics, history, anthropology, other disciplines to examine problems in their field. Course introduces concepts central to these approaches. Students learn about these theoretical perspectives through central texts related to disciplines of educational theory, develop a theoretical frame for Problem of Practice work based on perspectives examined in the class.

Mind, Brain Science, Learning (Doctoral level):
Building on Multiple Perspectives on Learning and Teaching, this course will survey theoretical and empirical research in the study of cognitive development focusing on recent and ongoing studies of memory, attention, language, and social/emotional development. Participants examine research literature from multiple fields in brain sciences, including cognitive science, experimental psychology, and neuroscience. General topics include an overview of brain structure and function, imaging technology, normal brain development, and how differences in development affect learning. They explore recent findings on topics such as the effects of stress, sleep, and multi-tasking on brain development and learning. They consider how research findings inform practice and policies in education and related fields.

Montgomery County Public Schools (Takoma Park Middle School)
Teacher (2011 – 2016)
Planned and taught Advanced World Studies and English, using creative teaching strategies and technology to enhance classroom management and student engagement. Provided rigorous, differentiated, engaging instruction for students. Held leadership roles such as PBIS Committee Team Leader (2013 – 2016), which involved establishing agendas, facilitating work of committee in developing and implementing school-wide behavior initiatives to promote school's core values, delegating responsibilities to team members, and following up on assigned tasks. Also served as Extended Year Program teacher (2013 – 2015), which involved developing and teaching a remedial reading and language arts curriculum to support reading and English skills for rising sixth and seventh grade students in need of further support. Responsibilities included establishing objectives, agendas, and pre- and post-assessments. Previous responsibilities also included serving as Yearbook Sponsor (2012 – 2014), Creative Writing Club Sponsor (2012 – 2014), and Mentor Teacher (Fall 2013).
Course Descriptions:

Advanced World Studies 7 (Secondary level): *This course follows the Montgomery County Public Schools curriculum as well as MSDE standards. Students learn to think about the world through four lenses: principles of political systems, principles of culture, principles of geography, and principles of economics. They learn to apply these lenses to understand various events, cultures, and phenomena throughout world history.*

Advanced English 7 (Secondary level): This course follows the Montgomery County Public Schools curriculum as well as MSDE standards. Students improve their analytical reading skills and their writing skills by engaging in writing assignments and reading selected texts and novels. Students examine literature and writing through four major domains: identity, sense of place, perspectives, and expressions. They practice various kinds of writing to improve their overall skills, and engage in high-level discussions about their reading.

University of Virginia, Department of Philosophy

Visiting Scholar (Summer 2013)
Collaboratively (with teachers from around the country) and independently worked to develop curriculum, teaching strategies implementing philosophical thinking skills into English/Language Arts and History curricula. Worked closely with Dr. Mitch Green in applying topics central to philosophical inquiry to pedagogy.

Anne Arundel County Public Schools (Marley Middle, Northeast High)
Teaching Intern (2011 – 2012)
Supported teachers in providing rigorous instruction and support to students in three distinct courses: World Studies 8; A.P. U.S. History; A.P. World History. Developed action research inquiry plan in Anne Arundel County Public Schools to analyze learning outcomes. Engaged students in learning intervention based on cooperation to support student achievement.

Loyola University Maryland, Department of Literacy
Research Assistant (2011 – 2012)
Supported Department of Literacy in gathering and analyzing literacy data in sixteen elementary schools in the Howard County Public Schools district.

RESEARCH GRANTS

Rice, P.C. (2013). *Hi-Phi Institute at the University of Virginia*. Sponsored by National Endowment for the Humanities.

MANUSCRIPTS

Rice, P.C. (in progress). *South Asian Americans' Perceptions of Experiences in School in Context of Teacher Cultural Competence*. (Dissertation).

Rice, P.C. (in progress). *Understanding South Asian American Students' Values: An Exploratory Study into the Values of South Asian American Students as Compared with East Asian American Students, and a Discussion of the Importance of Teachers' Cultural Competence*. (Submitting to Berkeley Review of Education).

CONFERENCES

April 21, 2012. *Motivating Students Using Cooperative Competition to Increase Student Engagement.* Curriculum, Creativity, Caring and Competence. The Maryland Professional Development School Network Conference. Sponsored by the Maryland State Department of Education.

BIOGRAPHY

Punita Chhabra Rice was born in New Delhi, India, and grew up in Maryland. Her research is inspired, in part, by her experiences growing up as a South Asian American student who did not fit the model minority stereotype. Her background in education includes teaching in the humanities (World Studies; English) with an emphasis on teaching historical thinking skills. Prior to entering the education world, she held a variety of positions in both sales and marketing. Punita holds a Bachelors in Psychology from the University of Maryland, and a Masters in teaching from Loyola University Maryland. She hopes to continue her research examining the schooling experiences of South Asian Americans. She lives in Maryland with her husband and son.